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Water colour drawing, artist unknown, from the collection recently presented to the R.I.B.A. by Mrs. Maurice Webb.



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## Journal

### MEETING AT THE R.I.B.A.

A general meeting will be held at the Royal Institute of British Architects on Tuesday, 4 June, at 8 p.m., when Sir Charles Bressey, C.B., Past President of the Chartered Surveyors' Institution, will read a paper on the "Highway Development Survey of Greater London," which he and Sir Edwin Lutyens prepared. And on Tuesday, 18 June, at 8 p.m., Mr. R. Fitzmaurice, of the Building Research Station, will read a paper on the important subject of "Alternative Methods of Construction."

### THE R.I.B.A. RESEARCH AND BUILDING TECHNIQUE

Some JOURNALS since the war have chiefly been filled with reports of meetings and reports of professional-political discussions, so that it might almost seem as if the profession was resigned to fighting the war in lobbies. It is salutary, therefore, to have a JOURNAL the chief emphasis of which is on technical matters and research, because the service which architects can render during the war is primarily a technical service.

The more expert architects are as technical men the more chance they will have to maintain the profession's place in war and re-establish it in whatever civil life we may be able to develop after the war.

The first article is an abstract of the new WARTIME BUILDING TECHNIQUE Bulletin No. 1, issued by the B.R.S. The introductory note on page 163 emphasises the importance of this bulletin, an importance which extends beyond the relevance of this particular bulletin to the immediate duties of any particular architect. The part of the bulletin published here is not the whole and must not be taken as if it was. Each architect should buy it for himself—the cost is only one shilling.

The second article is the memorandum signed by the President on the work of the R.I.B.A. Research Board, followed by extracts from the *Outline of Proposed Research* which has been sent to a large number of organisations, universities, schools, Institute Allied Societies and individuals throughout the country.

The Council has been enabled to set up the Board's organisation and to provide it with a secretary through

the kindness of Mr. Alfred C. Bossom, M.P., in allowing the funds of the Alfred Bossom Fellowship to be used for this purpose. Without this fund it would have been impossible for the R.I.B.A. to embark on an organisation of this scale. The use of the Alfred Bossom fund was changed a year ago from a prize for construction and building finance to provide an open research fellowship; although the war has made it impossible for the first fellowship award to be made, there is cause for satisfaction that such an important use has been found with Mr. Bossom's co-operation for the fund now. We earnestly hope that architects everywhere in the country will co-operate individually and collectively in this important work. The Board consists of the following members:—

H. S. Goodhart-Rendel [F.] (*Chairman*), Howard Robertson [F.], R. A. Duncan [A.], W. H. Ansell [F.], Alister MacDonald [F.], Miss J. G. Ledebor [A.], Richard Henniker [A.] (*Secretary*), 23 South Molton Lane, Davies Street, W.1, to whom all communications should be sent.

As the last of these technical matters members will find inserted in the Journal the first of a series of leaflets prepared by the Cement and Concrete Association on war-time cement and concrete building practice for floors and flat roofs. The War Executive Committee has decided to insert them in the belief that they will be useful to architects faced with the necessity of building without timber, but we may point out that the architects' whole problem is not solved by applying these designs as rule of thumb solutions. They must be used intelligently and with full realisation of the particular problems associated with concrete structures. The architect in building with timber can exercise control of the quality of his timber by inspection on the site, but he cannot check reinforced concrete products in this way. He must therefore learn how to safeguard himself.

#### ECONOMISING "JOURNAL" CIRCULATION

There is one aspect of JOURNAL economy in which members can help. It is necessary both from a national and from the R.I.B.A.'s point of view to avoid printing and distributing JOURNALS wastefully. Therefore any member who is prepared to forgo the receipt of his personal copy is asked to let us know. Quite a number of members share offices with partners or other architects and can with complete convenience share one JOURNAL between them; others work in public offices where there are always copies to be seen, and other members can be certain of seeing the JOURNAL in a club or library. We want to encourage no one to surrender his JOURNAL unless he can be absolutely certain of seeing a copy of each issue. As this number typifies, the war JOURNALS will contain a large amount of invaluable technical information which it is the duty of members to read. The JOURNAL will not wriggle out of existence but,

assisted by economies in some sides of its production, will, as long as it is able to appear at all, be able to increase its value for members and the relevance of its contents to immediate problems.

Members who are willing to relieve the R.I.B.A. of its obligation to send them copies individually are asked to write soon to the Secretary.

#### BOOKS FOR SERVING ARCHITECTS

Collections of books are being formed for men and women on active service and for prisoners of war by, in the former case, a committee organised by the Lord Mayor of London and the Lord Provost of Edinburgh, and, in the latter, by the Red Cross. Members of the R.I.B.A. are asked to co-operate by giving books from their libraries which can be sent to architect soldiers, sailors and airmen through the agency of these bodies. There is urgent need not only for recreational books but—and this particularly is the R.I.B.A.'s interest—for technical books and books in any way concerned with architectural ideas, history and culture, by which those on service can be enabled to keep in touch with architecture for their own refreshment in the anxieties and even the boredom of war, for their constant preparation for their eventual return to civil life and to help those who have not yet passed their examinations to educate themselves while they may.

The books most wanted are, for students, those listed in the R.I.B.A. syllabus for the final and intermediate examinations, for qualified men, *up-to-date* textbooks of all kinds, and for everyone good stimulating books on architectural aesthetics, sociology, science and economics.

Members who want to help should look out *good books*, "junk" is not wanted, and should send them to the R.I.B.A., addressed to the librarian, with each parcel clearly marked "*Books for serving members.*" In order to assure that the books sent by members are distributed to architects a depot will be formed at the R.I.B.A. As we hear of members who are prisoners we shall communicate with them through the Red Cross and arrange to send books of the kind that they want. Members serving anywhere in England can at present borrow freely from the Library—and many do—so there is no need to allocate gift books to them. All the books given under the proposed scheme, except those sent to prisoners, will go to architects serving at sea or overseas and an attempt will be made to operate the service simply and directly as an extension of the Library service—with of course the big difference that the readers can be under no obligation to return the books.

No details can be settled finally yet. The first thing is to get the books or to have lists from members of the books they would be willing to give. All communications should be made to the Librarian who will be glad to help with advice. The need is urgent.

## BUILDING TECHNIQUE IN WAR-TIME

Problems arising out of the war-time shortage of certain building materials are among the most urgent and the most interesting and stimulating of all the problems before the building industry now. "The most urgent" because, without alternatives to materials in short supply and to the conservative and comparatively expensive methods of construction normally used, war-time building is hindered or made impossible, or if allowed to continue is a drain on the resources of the country. "The most stimulating" because a time of emergency is a genuine stimulus to the scientists—to architects too—to think out their problems anew, to discard out-worn methods and the dead traditions of a period of complacency and inertia. Many people, the building scientists outstandingly, have been aware for years of the potentialities of advanced techniques, but have been given too little opportunity of applying their imagination and scientific skill to the actual problems of structure.

We shall not, we hope, be accused of complacency or lack of awareness of the hideous destructive influences of war if as an aside we recognise this possibly stimulating and liberating influence on one side at least of our affairs.

Architects must recognise the implications of this work and adjust their whole thought to the lessons that are to be learnt from war-time technical research. They must do so not merely to preserve their place in the community but much more essentially because, even for war uses, structure alone is not enough.

For many months the staff of the Building Research Station have been vigorously engaged on research into alternative materials and methods of construction in conjunction with other Government departments and particularly with the A.R.P. section of the Ministry of Home Security. To assist the B.R.S. the D.S.I.R. has appointed a special *Committee on Alternative Materials and Methods of Construction* under the chairmanship of Mr. G. M. Burt, F.I.O.B., with the following membership:—

Mr. T. P. BENNETT [F.], Hon. F.I.O.B.

Mr. W. T. HALCROW, M.Inst.C.E., M.I.Mech.E., M.Inst.W.E.

Mr. E. C. HARRIS, F.S.I.

Mr. B. L. HURST, M.Inst.C.E., M.I.Mech.E., M.I.Struct.E.

Mr. R. T. JAMES, M.Inst.C.E.

Mr. J. W. LAING.

Mr. G. B. SHARPLES, O.B.E., M.Sc., M.Inst.C.E.

Mr. SYDNEY TATCHELL [F.].

### Assessors:

Admiralty: Mr. F. SHIRLEY, M.Inst.C.E., A.M.I.Mech.E.

Air Ministry: Mr. G. S. HALLAS, M.C., B.Eng., A.M.Inst.C.E.

Department of Agriculture for Scotland: Mr. A. G. INGHAM, A.M.Inst.C.E., F.S.I., M.R.San.I.

Department of Health for Scotland: Mr. J. WILSON [F.], F.R.S.E.

H.M. Office of Works: Mr. H. RYLE, C.V.O., O.B.E., F.S.I. [A.].

Sir JAMES G. WEST, O.B.E. [F.].

Ministry of Health: Mr. R. G. HETHERINGTON, C.B., O.B.E., M.Inst.C.E.

Mr. A. SCOTT, M.B.E. [F.], M.I.Struct.E.

Ministry of Home Security: Sir ALEXANDER ROUSE, C.I.E.

War Office: Brigadier P. W. BLISS, R.E.

This Committee has now issued its first Bulletin dealing with economical type designs in structural steelwork for single storey factories. This subject, chosen because of its obvious urgency, has been handled in a way admirably adjusted to the present time and opportunities. The Bulletin must be bought and studied by every architect in the country. The architect who dismisses this or any subsequent Bulletin as "an engineer's affair" does so at his peril. Not only will the individual who neglects to pay closest attention to the course of these researches be failing to acquire cheaply and easily essential knowledge invaluable to him personally but he will, by his neglect, be acting in a way harmful to the repute of the whole of his profession.

*The important thing that this notice must achieve is close attention to these Bulletins from all architects. The D.S.I.R. wants architectural comment and co-operation from the rank and file of the profession to supplement the strong architectural representation that they have provided on the advisory committee and within the Department.*

## ECONOMICAL TYPE DESIGNS IN STRUCTURAL STEELWORK FOR SINGLE STOREY FACTORIES\*

The following abstract is not intended and must not be assumed to be adequate to replace the original full Bulletin. The abstract consists of verbatim extracts from the Bulletin. All omissions from the original are indicated by dots, three dots representing the omission of a part of a paragraph, a whole line of dots the omission of one or more paragraphs. It is hoped that by presenting the Bulletin in this way readers of the Journal will get a fair impression of the scope of the Bulletin's contents and its general character. The smallest only of each of the three types of factory are illustrated by extracts from the pages of illustrations in the original.—Ed.

### 1. INTRODUCTION

The designs included in this Bulletin have been carefully prepared to meet war-time conditions. Problems of supply, of lighting, and of economy, consonant with maximum stability against air attack, were the fundamental considerations on which the designs were based. Within the limits of stress and loading which are described in these notes, the designs represent drastic cutting down of all superfluous metal. They are intended for multiple bay construction only and for such represent the maximum economy of our steel resources.

... economy in steel is tied up with dimensions of bays; thus long spans can generally only be obtained at the expense of an increase in the quantity of steel. Having in mind the national need to economise, it does become essential, in planning the building, to consider more than usually carefully how far, without impairing productive efficiency, requirements of space can be modified to meet the need for economy in material and cost.

### 2. A.R.P. CONSIDERATIONS—STRUCTURAL

In terms of war-time factory construction, it is important that A.R.P. requirements should be adequately met from the start. The main object is to minimise the loss of production due to air attack. The first requisite is to provide lateral and overhead protection in such cases where the plant or material being manufactured is vulnerable to effects of air attack, and to minimise the area of the factory likely to be destroyed by the effects of a direct hit.

#### DEGREE OF PROTECTION REQUIRED

Generally speaking, the whole of the building should be enclosed by walls sufficient to give resistance to splinters from high explosive bombs, i.e., 13½ in. brickwork or its equivalent. These walls should be carried up above the height of vulnerable machinery. Large areas of side window extending to within a few feet of the floor are not suitable for war-time factories.

... If penetration by light incendiary bombs or falling fragments from anti-aircraft shells is to be avoided, then it is necessary to provide a reinforced concrete slab at least 4 in. thick or its equivalent ... such a protective roof is not suggested for all buildings, but it is necessary where the factory or part of the factory contains delicate plant likely to suffer much damage from falling fragments or, for instance,

\* 410, 30 pp. London, H.M.S.O., 1940, 1s.

Working drawings for the designs described in the Bulletin may be obtained by firms engaged on work at the instance of a Government department on application to the Iron and Steel Control, Steel House, Tothill Street, London, S.W.1, 2s. post free for each type.

where important foodstuffs are handled or inflammable articles made or assembled. . . .

In view of these requirements, two types of standard design have been prepared:—

(a) With full overhead protection, composed of 4 in. of reinforced concrete. (Type A.)

(b) Unprotected, i.e., roof with light sheet covering such as asbestos cement or corrugated steel sheet. (Types B and C.)

#### MINIMISING EFFECT OF A DIRECT HIT

It is not practicable to provide a structure resistant to a direct hit by a high explosive bomb, but it is essential to minimise the damage as far as is economically possible. Certain common structural types have the serious disadvantage that they are liable to progressive failure. When a main member is cut, the roof trusses supported by it fall, and in doing so bring about the collapse of the adjacent main member with the roof it supported, and so on. The types illustrated in these notes have been chosen with the object of avoiding this form of failure.

(Notes on the effect of direct hits on structures types A, B and C.)

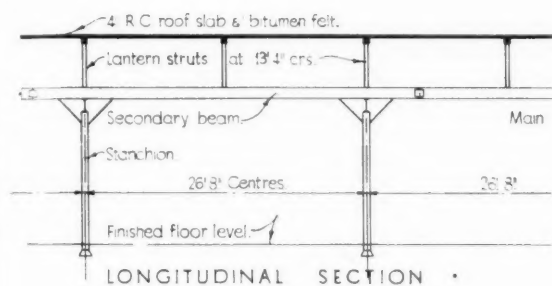
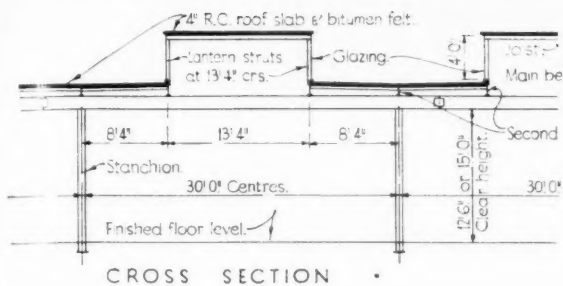
#### TREATMENT OF GLAZING

All glazing in factories is particularly vulnerable to the effects of air attack. The blast from a large bomb may shatter glass over a wide area and sloping glazing is obviously very liable to be fractured by falling fragments from anti-aircraft fire. Light sheet roof coverings will easily be penetrated by fragments, but they are easily repaired. Glass on sloping surfaces however can only be made weatherproof by replacing it when broken; other treatments result in loss of light. Vertical glazing is very much less vulnerable to falling fragments, since a much less area is presented, and even should the glass be cracked by the effects of blast from more distant bombs, it will still remain reasonably weatherproof, where glazing on sloping surfaces would probably leak badly. On balance therefore there seems good reason to use vertical glazing, and this has been done in the type designs described in these notes.

... it is desirable to use wired glass.)

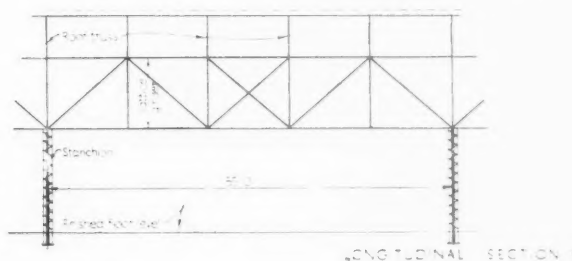
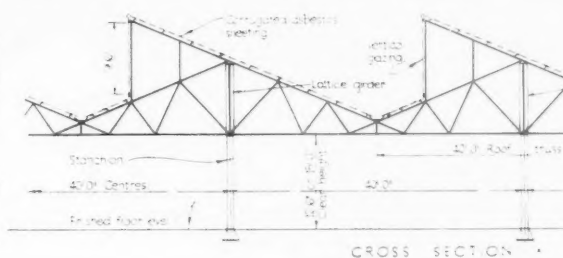
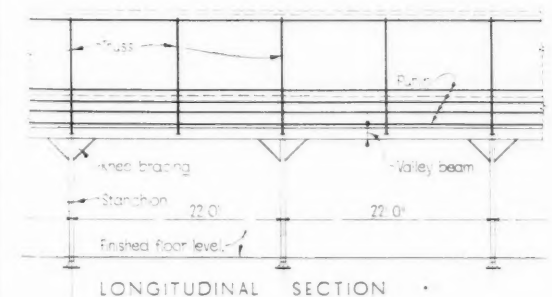
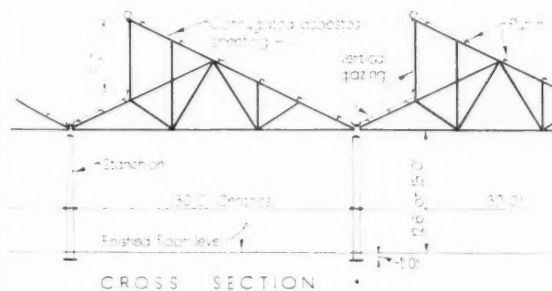
#### CAMOUFLAGE

In the present designs the camouflage problem has not been considered. Vertical glazing in roofs casts shadows which, from the camouflage point of view, are unfortunate. In country districts, therefore, where shadows are most difficult to disguise, it will be necessary to consider other forms of daylighting. Designs incorporating these will be published shortly.



Type A 30/27 (above)

Type B 30/32 (below)



Type C 40/55

EXTRACTS FROM THE DIAGRAMS IN THE BULLETIN

## 3. TYPES OF DESIGN CONSIDERED

The present designs concern single storey open shed type factories. . . Two alternative heights are given in the type designs, viz., 12 ft. 6 in. and 15 ft. . .

The designs cover three types of structure. . . Type "A" is a monitor roof design giving overhead protection consisting of a 4-in. reinforced concrete slab (A.R.P.D. standard of protection). The supporting structure is of the simplest character, consisting of stanchions with main and secondary steel beams requiring the bare minimum of fabrication and capable of great rapidity of erection. . .

Type "B" is a simple, symmetrical truss with an extension of the principal rafter on one side to provide a panel of vertical glazing. The support of the trusses is by a valley girder on stanchions.

Type "C" consists of symmetrical "umbrella" type trusses supported by a lattice girder on stanchions at the centre of the trusses. This type has been designed for larger spans. The lighting is formed as in Type "B." . .

Whilst the details are complete for a standard factory bay, the combination of the members into a complete building should only be made under competent engineering supervision; a lack of appreciation of the purpose of the various details or failure to take account of the conditions of loading and stress assumed in the designs might result in a hazardous structure.



## 4. NOTES ON THE DESIGNS

## DAYLIGHTING

In view of the vulnerability of glazed areas it is considered desirable for war-time factories to reduce the area of glazing to the minimum compatible with adequate lighting in the working space. This is a condition which does not arise in ordinary times. The designer is usually content to provide a liberal amount of light and leave it at that. Designing down to a minimum requires careful technique.

The subject is separately discussed and a simplified method of estimating efficiency of daylighting given in Appendix I. By the use of this method, the draughtsman should be able to determine the adequacy of a proposed system in a few minutes. Factories designed on this basis may be considered inadequately lighted for normal peace-time usage, but it should be a simple matter to introduce additional glazing at the end of the war, with the addition of extra purlins as required, especially if the point is kept in mind in the original design.

## BLACK-OUT

For a factory affording the highest degree of protection, it is essential that the combination of glazing and black-out device should provide weatherproof protection to glazed areas in the event of a bomb bursting somewhere in the near vicinity, i.e., should the glass be broken, then the black-out device must remain weatherproof and lightproof until such time as the glass can be replaced. No lightweight external shutter system can be expected to give more than very slight protection to the glazing behind. Therefore problems of weatherproof and lightproof protection to glazing in the designs here reproduced appear to be met best by a combination of wired glass in a vertical glazing system and a suitable form of blind or shutter behind. This is the method which has been followed. . . .

It is also essential that any system of black-out should be as simple as possible to reduce faults in operation and maintenance costs. Various kinds of shutters and blinds are shown in Fig. 1, and Types 1 and 2 are recommended as being the most satisfactory. . . .

Type 1 shows a simple top hinged shutter which can be operated with the minimum danger of breakdown, and in which the shutter falls by gravity, so that if any fault does occur it will leave the windows blacked-out. . . . It is a fairly simple matter to design such shutters to form a reasonably weatherproof structure in the event of the glazing being broken.

Where a system of blinds is considered adequate, the ordinary spring roller blind is suggested providing that certain precautions are taken. . . .

Details have been prepared showing the application of shutters and blinds to the standard designs "A," "B" and "C," and can be obtained on application to the Building Research Station.

## VENTILATION

To obtain satisfactory ventilation through the windows would involve elaborate precautions to overcome black-out problems. It is therefore assumed that ventilation will be provided by roof ventilators and wall fans. These fittings

will, of course, have to be lightproof and reference should be made to the British Standard Specification B.S./A.R.P. 31 which deals with these points.

## WINDOW CLEANING

Since none of the windows will be made to open, cleaning will have to be from both sides. . . .

## GUTTERS AND DOWNPIPES

Suggested details dealing with these points have been incorporated on the black-out drawings.

## WEIGHT OF STEEL

. . . External bays will require individual consideration, for it is desirable that the external walls should consist at least of 13½ in. of solid brickwork, and, in the interests of economy in steel, the external walls should be designed of adequate strength to support all vertical loads from the roof edges, and also for wind pressure and other lateral pressures upon the walls themselves. No steel framing would therefore be provided in the walls. Certain of the girders have been designed as continuous members, and, lacking continuity where supported on outside walls, it will be necessary to reduce their spans in the end bays to the extents marked on the detail.

A further economy in steel can be obtained by eliminating the steel stanchions and substituting reinforced brickwork. Details of typical reinforced brickwork column designs are given in Appendix II and Fig. 5, together with a draft specification and erection notes. Further column designs will be given in a future Bulletin.

## LOADING

## General

No provision is made in the designs for loads suspended from the roofs or carried on stanchion brackets. Shafting, crane rails and black-out gearing, etc., must be provided for separately.

The structures considered as a whole have been designed for loading on the basis of Clause IV in the Report on Steelwork for Buildings, Revised 1938, published by the Institution of Structural Engineers. . . . The designs have been prepared for a factory of minimum width, at right angles to the roof slopes, of about 200 ft., and would be applicable to buildings of this or greater width. Any buildings of a less width would require special calculation for wind pressure on the stanchions.

*Flat Roofs Type "A." Protected Designs*

*Sloping Roofs Type "B" and "C"*

1. *Dead Load.* . . .
2. *Wind Loads.* . . .

## STRESSES

## NOTES ON ERECTION

## APPENDIX I DAYLIGHTING FOR NEW WAR FACTORIES

### *The Problem*

The daylighting of factories in war-time introduces difficulties calling for special considerations in design which do not arise in time of peace.

(a) all glazed areas required for daylighting have to be efficiently obscured during the hours of "black-out," and obscuration is usually more cheaply and efficiently contrived with vertical glazing than with sloping.

(b) the effect of an explosion of a bomb in the vicinity of a factory is to shatter glass which is not reinforced or protected by strong shutters. This may not be disastrous in itself, but the breaking of the glass makes the problem of weatherproofing very difficult. It may not be easy to replace large quantities of glass at short notice, and the entry of wind and rain through the broken glazing will hamper production in the factory, and in some cases may even stop it altogether.

(c) glazing on sloping surfaces is more likely to be broken by falling fragments from anti-aircraft gun fire than is vertical glazing, and the latter is more easily protected by a small projection of the roof over the top.

(d) trouble from solar heat transmitted through extensive areas of sloping roof glazing in summer is likely to be acute in war-time, owing to the impossibility of treating such areas with whitewash or similar reflective treatment.

(e) incline roof glazing gives rise to reflection. It will have to be given anti-shine coatings (which collect dirt and reduce light transmission) or it will have to have external shutters. Vertical glazing is free from these difficulties.

(f) factories erected in rural areas may have to be camouflaged. Vertical glazing casts shadows which are difficult to disguise effectively, and vertical glazing will in such cases be disadvantageous.

Taking account of these factors there is good reason to recommend in larger continuous single-storey factories erected in cities that roof glazing should be vertical, and that the area of glazing should be the minimum required to secure adequate daylighting. Factories erected in suburban areas have substantially the same requirements as those built in cities, but for rural sites problems of camouflage apparently dictate a minimum of vertical roof glazing. This special consideration will be dealt with in a future Bulletin.

... it is always possible provided the point is borne in mind when the building is first designed to arrange so that more glazing can easily be inserted when the risk of war damage is past.

... simple methods of predicting the efficiency of proposed methods of lighting have been worked out at the Building Research Station and were reported in the Annual Report of the Building Research Board for the year 1938 (H.M. Stationery Office, price 3s. 6d. net). . . .

Special "daylight factor protractors"\* have been produced at the Building Research Station by the aid of which any designer can quickly obtain an estimate of the adequacy of his proposals and make the necessary adjustment. . . .

### *The Measurement of Daylight in Buildings*

... (definition of "daylight factor.")

\* A note describing these protractors will appear shortly in the Journal of Scientific Instruments.

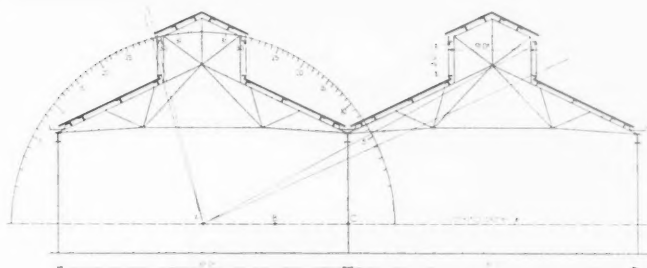


Diagram showing the application of the protractor to a factory building section in the calculation of daylight factors

The practical problem is to design the glazing so that it provides adequate light for the work being done in the factory at the darkest part of the working space on an average dull day. For purposes of design, therefore, it is necessary to assume some minimum value of the daylight factor which will give adequate illumination on an average dull day. In the present state of knowledge, it is not possible to make a final recommendation as to a minimum value which should be universally adopted. However, in war-time there are special glazing problems to be faced and it is necessary to adopt some minimum value for the daylight factor.

It is suggested that for factories where normal machining operations are to be carried on, the designer should proceed with his design on the basis of providing a daylight factor of 5 per cent., given that the illumination at the working plane is reasonably uniform. If exceptionally fine machining or delicate operations are to be carried on it may be desirable to increase this figure, but in such circumstances the whole lighting problem must be carefully considered.

### *Obstructions*

Sunshine, like reflected light, is not possible of computation by the present methods and can probably be best considered as a problem of orientation. Where, therefore, the glazing is unsymmetrical it is suggested that it be faced northward in the usual way, and that symmetrical glazing, in the form of continuous lanterns or monitors, be oriented on a north-south axis, which will face the glass to east and west. The more marked effects of sunshine will thereby be avoided.

... where minimum lighting conditions are the aims in a design, the best possible uniformity of lighting at the working plane is essential. . . .

### *The Simple Computation of Daylight Factors*

Fig. 2 illustrates the protractor\* . . . The scale on the protractor is a daylight factor scale, and the readings made are therefore direct.

\*The Daylight Factor Protractors, made in clear celluloid, can be obtained on application to the Building Research Station, price 3½d. post free.

Its use may be described as follows :—

- (a) Upon a cross-section drawing of the proposed factory design the working plane should be set out, and a representative number of points chosen for examination.
- (b) From the first of these points sight-lines should be drawn through the edges of all glazed areas through which the sky is directly visible.
- (c) The protractor is then set on the drawing, with its centre at the point under examination and its base along the working plane.
- (d) The daylight factor for each area of glazing can then be read off directly as the number of divisions on the scale lying between the pair of sight-lines delineating that particular area.
- (e) The total daylight factor for the point under examination will be the sum of the factors for the various glazed areas through which the sky is visible.

(An example is worked out in detail.)

## WHAT THE INSTITUTE IS DOING

### *A Synopsis of some recent activities*

1. **CONTACTS WITH GOVERNMENT DEPARTMENTS.**—The President and representative members of the Institute have maintained contacts with Government Departments in order to direct, so far as possible, the knowledge and experience of members into useful channels of activity.

Members are again reminded that they should notify the Institute of appointments taken up or vacated so that the registers can be kept up to date and opportunity taken to place other members in vacancies.

2. **THE BUILDING INDUSTRY IN FRANCE.**—The interesting letter, addressed to the President by Lt.-Col. Maigrot, Past-President of the Société des Architectes Diplômés par le Gouvernement, has already been published in the JOURNAL, and has been made known to the Ministry of Supply, the Treasury, the Office of Works and other Ministries. It has also been sent to certain Members of Parliament, and has been referred to in the Press.

3. **CONFERENCE WITH THE SPENDING DEPARTMENTS.**—This matter has been left in the hands of the Building Industries National Council as being fully representative of the whole industry.

4. **RESEARCH SCHEME.**—The Special Committee has presented its report which has been approved by the Council. The Research Scheme will be the subject of a separate and full announcement in the JOURNAL.

5. **CAMOUFLAGE.**—Mr. Edward Maufe and Mr. Murray Easton are representing the Council in the effort to insure that architects are employed in this work.

6. **GRANTS FOR SCHOOLS.**—The Government are being urged to make grants to local authorities for drawings and quantities to be prepared for school buildings where projects have been postponed so that no time-lag shall occur when peace comes.

7. **ALLIED SOCIETIES AND THE INDUSTRY.**—A deputation from the Birmingham and Five Counties Architectural Association has been received by the Lord Mayor of Birmingham on the position of the building industry.

The President and the Secretary attended a luncheon organised by the Manchester Society of Architects at which many local laymen were present. The President's address was reported in the *Manchester Guardian*.

## APPENDIX II REINFORCED BRICK COLUMNS

### 1. GENERAL DESCRIPTIVE NOTES ON ORGANISATION

#### *General*

Reinforced brick columns can be compared structurally to reinforced concrete columns, so that it follows that many of the construction methods, details and precautions commonly observed for reinforced concrete will apply to the construction of reinforced brick columns.

Subsequent paragraphs deal with Brick Storage ; Preparation of Mortar ; Steel Reinforcement ; Method of Procedure ; Wetting of Bricks ; Loading ; Scaffolding.

### 2. DRAFT SPECIFICATION CLAUSES FOR REINFORCED BRICK COLUMNS

.....

8. **THE 1922 COMMITTEE.**—The President and Mr. Johnston, President of the Building Industries National Council, addressed a meeting of the 1922 Committee of the House of Commons, and further information has since been sent to the Chairman of the Committee.

9. **MEETING OF MEMBERS OF PARLIAMENT.**—Mr. Howard Robertson has also addressed a meeting of Members of Parliament in the absence of the President who was indisposed. The meeting was organised by Mr. Alfred C. Bossom, M.P., who was in the chair, and some forty or fifty members were present. The meeting was addressed by representatives of all sections of the building industry.

It is hoped that both these meetings will have good results.

10. **ROYAL GOLD MEDAL.**—His Majesty the King has been graciously pleased to approve a suggestion that the definition governing the award of the Royal Gold Medal should be modified. The amendment will allow the nomination to be made in a slightly larger field of those who have rendered distinguished services to architecture.

11. **ROYAL COMMISSION ON THE DISTRIBUTION OF THE INDUSTRIAL POPULATION.**—The President had addressed a letter to the Government expressing pleasure that the Government had realised the need for alterations in the prevailing system and the hope that the suggestion for having a national scheme will be implemented. The letter also expressed the hope that the Government would embark on comprehensive research with the aid of national funds at the earliest possible moment, and the Royal Institute's willingness to participate in such research.

12. **SUSPENSION OF BYE-LAWS.**—The Privy Council has agreed to the suspension of the annual election of the Council and to the suspension of the Bye-laws concerning the meetings of the Council and General Meetings. The Privy Council has confirmed the appointment of the War Executive Committee to act on behalf of the Council.

13. **SHELTERS FOR PERSONS WITH INCOMES OVER £250 PER ANNUM.**—A nominal fee has been agreed with the Home Office as suitable for advice given, including, if necessary, a short report, to be paid by the householder. A note on this matter has already been published in the JOURNAL.



# THE R.I.B.A. RESEARCH BOARD

## *A Statement of the Formation and Aims of The R.I.B.A. Research Board*

In the years since the last war the many branches of the British Building Industry have acquired from various causes a greater cohesion and unity than ever before. During this period, too, the industry has largely abandoned a traditional approach to its problems in favour of a scientific examination.

Such a change of outlook has involved much research. But while the structure of the industry has achieved a considerable degree of internal organisation, the correlation of research—both executed and to be done—has lagged behind.

The present war has served to show the extent to which the many sides of the industry, both professional and commercial—architect, surveyor, engineer, contractor, operative, supplier and manufacturer—are dependent on each other. To the extent that many of the best brains of the industry are unemployed it has also provided—for a time at any rate—the necessary leisure during which to take stock of the many problems which are presenting themselves now and will arise in the post-war period. There is no doubt that the industry has the power and ability, if it has the will, to provide against any repetition of the disappointing results of the chaos of the post-war period of twenty years ago.

The Council of the Royal Institute of British Architects has appreciated the need for a systematic study of all these problems. It has been urged not only by its own members, but by outside bodies, to set up the machinery for such a survey.

A special Committee has been engaged in preparing a syllabus of research and methods by which this could be carried out; and as a result the R.I.B.A. Council has appointed a Research Board to put the scheme into operation.

The syllabus covers certain aspects of Rural Building Requirements, Urban Housing, Materials, Costing, Legal and Building Regulations, Town and Country Planning, Health and Recreation, and Unification and Standardisation. Its scope is regulated by the desire to cover fresh and unexplored fields, and to deal with broad principles rather than with the details of actual buildings.

A further series of Committees represent an Architectural Science Group, whose object is to study and report on scientific developments that are applicable to building, and on the use of scientific methods in building. The Group has the close collaboration of the Building Research Station of the Department of Scientific and Industrial Research, and includes among its personnel not only members of the Royal Institute of British Architects but persons distinguished in science, engineering, research and technical education.

Under many of the headings of the syllabus considerable research has already been done, but much of this requires collecting and correlating. The method of approach would appear to be first the undertaking of a general survey of particular problems in order to collect existing information, and secondly a formulation of the directions in which further study is desirable. Such further studies would form the nucleus of subsequent items of research.

Much of this work is long overdue; not only will it be urgent after the war, but it is likely that then there will almost

certainly be little time in which to do it. Centralised research will make a substantial contribution to maintaining the economic strength of the whole building industry, besides preventing many of the mistakes that were made by all parties concerned with reconstruction after the last war.

The organisation required to undertake the work must be of a flexible character. The Research Board visualises the setting up of small Research Groups all over the country, wherever there is manifest the desire to help. Such Groups will undertake surveys of certain clearly defined problems, agreed by the Research Board, to whom the reports will be sent.

Reports on different aspects of a particular subject may be re-issued to an existing Group, or to a specially formed Group, for co-ordination or for additional research in certain directions. The Research Board will thus act as a co-ordinating centre to build up the research into a related whole for subsequent publication under the ægis of the R.I.B.A. It is in order to facilitate the building up of the whole research in this way that the Research Board has suggested the headings in the syllabus.

The Research Board suggests that Groups should select one or possibly two related items from the syllabus, and should confine their research within these limits. The Research Board must stipulate that any research which falls outside the suggested syllabus should not be undertaken without the Board's authority, if this research is to be included in the scheme. The Research Board has appointed a full-time Secretary who will be available to give advice to any Group and to act as a liaison between Groups and the central co-ordinating body.

The constitution of an individual Group may, of course, include anyone interested and willing to co-operate either as a member of a Group or as a consultant on particular points. The Research Board already has the active co-operation of various bodies, including the Building Industries National Council.

The Royal Institute of British Architects is fortunate in being able to enlist the support of its many influential Allied Societies, who by their location throughout the country are in a position both to instigate and lend help to Research Groups wherever they may be formed. The Institute is confident that such co-operation will be forthcoming.

It is obviously difficult, if not impossible, for the Research Board itself to originate the many Groups which they hope to see in existence, whether as a Group of Architects and others in a town, a University, the Headquarters of an Allied Society, a School of Architecture or Art, or a Technical School. But the Board will be willing to do all in its power to help the formation of Groups wherever it is learned the desire for such Groups exists.

They also ask the active co-operation of bodies which can assist in providing space for Group meetings and discussions, and even perhaps clerical assistance as this is certain to be required by the Research Groups as their work develops.

E. STANLEY HALL,  
*President*

## PROPOSED OUTLINE OF RESEARCH

(Abbreviated)

### RURAL BUILDING REQUIREMENTS

#### (I) Buildings needed now for evacuee use, but whose need is little less urgent for peace-time.

(a) Holiday Camps; (b) Village Halls; (c) Clinics; (d) Cottage Hospitals; (e) Adult Education Centres.

#### (II) Rural housing, including the following particular items.

- (a) Pre-war and present and future demands for accommodation.
- (b) The effects of the various legislation on the matter (Rural Workers' Housing Acts, etc.) and suggestions.
- (c) Tied Cottages with farms.
- (d) The connection of Rural Housing with agriculture.
- (e) The effect of nearby semi-suburban development in rural areas.
- (f) The effect on progress of the powers of the Parish Council.
- (g) Small Holders housing schemes.

(The position of rural housing in any revival of agriculture after the war has become more important in view of the almost certain necessity of reducing imports owing to a depreciated currency after the war. The backwardness of most rural areas needs survey, together with the effect of recent legislation aimed at its improvement. The probable post-war effect of the complete termination of any reconditioning or rebuilding during the war needs consideration.)

#### (III) Services needed now for evacuee use, but whose use is not any less in peace-time.

(a) Drainage; (b) Water Supply; (c) Light and Power (Gas and Electric); (d) Rubbish disposal (Controlled tipping).

(The increased population in rural areas due to evacuation has drawn attention to the lack of services in the majority of such areas. The placing of military and evacuation camps in the country with their attendant drainage and rubbish disposal has drawn attention also to the pollution of the existing water supplies; such pollution also being liable to increase in some districts owing to relative overcrowding through evacuees.)

### URBAN HOUSING

#### A general survey of Urban Housing including:

- (a) Analysis of demand, work held up by war, and effect of war on future demand.
- (b) Reconditioning of Urban Housing.
- (c) An analysis of the different policies in housing schemes sponsored by different authorities:—
  - (1) Borough, etc.; (2) Private; (3) Housing Societies;
  - (4) Housing Trusts.

### MATERIALS

#### (I) An analysis of the extent of pre-war importation from foreign and also Empire sources of the following materials, and comparison with home production.

- (a) to (m) Materials listed.
- (Such an analysis will be of great use in determining which materials are most likely to be affected after the war by limitations of import due to depreciated currency. It will be largely as a result of this analysis that research under headings (III) and (IV) of this Section will be conducted.)

#### (II) Study of materials from the point of view of their existing production or use, or lack of production or use.

- (a) Door furniture and locks; (b) Sanitary goods; (c) Kitchen equipment; (d) Light castings (fire places, etc.); (e) Gas and Electric fittings.

(It is suggested that a general survey on the trend of develop-

ment of the various fittings detailed may be of value in determining whether such development—partly in view of the multitude of types on the market—is proceeding along lines which are in the best interests of the building industry.)

#### (III) Research into the possibility of using substitute materials for timber, both from the practical and economic points of view, and including the effects on design. (Note. The extent of the pre-war importation of proposed substitute must be known.)

(This research follows as a direct result of the present scarcity and also from the probable post-war limitations of import due to a depreciated currency and the possible re-orientation of sources of supply.)

#### (IV) Research into use of substitute materials for any other materials found liable to excessive importation.

### COSTING

#### Study of cost of building methods with a view to indicating means whereby cost of buildings may be reduced.

#### Study of waste in building, including making good.

(It is suggested that a general survey of the cost of buildings might first be undertaken with a view to more detailed research into particular sides in which further research appeared profitable.)

### LEGAL

#### Study of all building regulations with a view to uniformity throughout the country, and also to suggest possible revisions where justifiable to reduce building costs.

Possibility of allowing relaxation of certain byelaws for given revival period and/or for buildings of a specified life only.

(cf. Also Public Health Acts and London Building Acts, New Factory Acts, etc.)

Commentary on such reports as R.I.B.A. Committee on Easements, Rights of Light, etc.

(It is not intended that the research in this group should include a detailed analysis of the existing regulations, but rather that the research should be of a more general character, and concerned with the regulations governing the structure of the building rather than the town planning aspect, which is dealt with elsewhere. The research will almost certainly require sub-dividing into such headings as General, Steel Construction, Reinforced Concrete Construction, etc.)

### TOWN AND COUNTRY PLANNING

A general survey of the position with regard to the various Town Planning Acts is indicated.

#### (I) Report on existing legislation.

- (A) As it affects urban and suburban development. It is suggested that comment might be made on this subject under the various headings.

- (B) Existing legislation as it affects the rural districts. It is suggested that comment might again be included under the same or similar headings as A. (1-6).

(The effects of the various Town and Country Planning Acts are in some respects so different as between rural and urban areas that consideration of many points may well be done separately under different headings, by different Committees with a Co-ordinating Committee drawn from both (or possibly more) groups to consider aspects common to both.)

**(II) Study of traffic problems and recommendations.**

- (a) The economic problems of passenger transport.
- (b) The economic problems of goods transport.
- (c) Pre-war road traffic—and its possible future tendencies.
- (d) Individual road problems.
- (e) Effects of recent legislation on traffic problems.
- (f) Passenger Transport Stations and Termini.
- (g) Street Furnishings.

**RECREATION IN RELATION TO HEALTH****(I) A survey of the means of healthy recreation, particularly facilities for exercise.**

- (a) Provision of playing fields and requirements. Analysis of extent of demand.
- (b) Public parks and open spaces.
- (c) Physical Fitness and Recreational Centres.
- (d) Physical Fitness and Recreational Buildings.

**(II) A survey of the stimulation in other countries of the nation's conscience for Physical Fitness and the effect it had on the building industry.****UNIFICATION AND STANDARDISATION**

It is suggested that a general survey be made of the effects the various attempts at standardisation have had on the industry. This survey is intended to cover a wide field, and would include such items as under, together with any others that may occur.

- (I) The practice of standardising steel window sizes, and the lack of standardisation of sizes of wood windows, although wood doors are standardised.
- (II) An analysis of the work done by the British Standards Institute in producing British standard specifications on matters of importance to the building trade.
- (III) A survey of the common troubles in building and the standardisation of their remedies.  
(It is thought that much of this information is in existence and only wants correlating. It is felt that if the results in this Section warrant, the material could with value be passed on to a further Committee dealing with cost in

order to obtain approximate price variations between methods.)

- (IV) The question of standard methods of delineation and specification—cf. Architecture Graphic Standards.
- (V) The use of the Standard information sheets, and the limitations, owing to their commercial production, for the architect.
- (VI) The study of office organisation with a view to providing greater uniformity, with special reference to some of the following :—
  - (a) Greater uniformity in drawings.
  - (b) Greater uniformity in specifications, instructions and information to contractors.
  - (c) The general system by which the architect at present obtains his technical information—i.e., catalogues, advertisements, technical information from firms and Press, etc. It is suggested that this might be dealt with under these headings :—
    - (1) Information from commercial sources.
    - (2) Information from official bodies, such as Building Research Station, National Physical Laboratories, Forest Products Research Laboratory, etc.
    - (3) Information from the letterpress of trade and technical periodicals.

The whole of this Section requires careful research to determine whether the practising architect really gets his knowledge of new methods and materials in the best way—whether the amount of money manufacturers spend on their advertisements is justified, especially in view of the frequent complete lack of any information of interest to the architect in such advertisements. In this connection care must be taken to discuss only those advertisements appearing in papers whose sole and principal appeal is to the architect, and to differentiate them from those papers whose main purpose is to appeal to builders. The system of travellers' samples, issue of blotters, note-pads, etc., all call for review.

It is felt that some means of simplification on many sides of this Section would be of great advantage.

**THE INSTITUTE'S APPEAL**

The following is the fourteenth list of donations received up to 6 May 1940 in response to the appeal issued to all members and honorary members and students on 16 December 1938.

Members who are contemplating making an increased payment of subscription whereby the amount of the increase will be payable to the appeal fund are reminded that if they are prepared to enter into an agreement for the payment of such increased subscription for a period of seven years or more they will be entitled to deduct income tax at the standard rate from the amount by which the subscription is increased.

Full particulars were published in the issue of the JOURNAL for 6 February 1939 and can be obtained on application to the Secretary, R.I.B.A.

DONATIONS	£	s.	d.
R. B. Binyon [A.] .. .. .	1	1	0
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DONATIONS FROM R.I.B.A. ALLIED SOCIETIES	£	s.	d.
Institute of Southern Rhodesian Architects (3rd donation) .. .. .	8	8	0
East Africa Institute of Architects (being part of the rebate of members' subscriptions for 1939) .. .. .	3	6	6
New South Wales Chapter, R.A.I.A. „ .. .. .	9	14	3

**INCREASED SUBSCRIPTIONS**  
The following members have promised to increase their annual subscriptions by the amount and for the number of years inserted in brackets against their names :—

	£	s.	d.
P. W. Pocock [A.] .. .. .	1	1	0 (3)
Chas. M. Swannell [F.] .. .. .	3	3	0

a year until further notice  
The donations and increased subscriptions or contributions received and promised and bank interest up to 6 May 1940 represent a total of £7,042 18s. This amount does not include increase of subscriptions or contributions promised for which no definite period is stated.

## Book Reviews

*Since the start of war the overwhelming number of articles, dealing mostly with essential professional information, has forced the Book Review section out of the JOURNAL. In this number it is possible to bring it back and we hope now to continue it regularly. So that the section may be as complete a guide as possible to books received by the library the reviews are all short abstracts with enough comment and criticism to throw a light on the book's qualities*

### "A SPOT OF TIME"

AN INTRODUCTION TO MODERN ARCHITECTURE. By J. M. Richards. Sm. 8vo. 126 pp. + 32 pp. photos. London: Pelican Books. 1940. 6d.

THE NEW ARCHITECTURE (DIE NEUE ARCHITEKTUR, LA NOUVELLE ARCHITECTURE). By Alfred Roth. Ob. fo. 234 pp. Zurich. Dr. H. Girsberger. 1940. £1 17s. 6d.

ERIC MENDELSON. By Arnold Whittick. 4to. 180 pp. + 54 pl. London. Faber & Faber. 1940. £1 5s.

"Modern architecture" is a phrase that has accumulated a mass of contention into its meaning; there is a touch of arrogance in the claim to the name enough in itself to startle and annoy. But the fact that a special thing called modern architecture exists is sufficiently established for it to be unnecessary to suggest now that when we speak of modern architecture we mean the whole range of contemporary architecture. So far the modernists can be said to have won a dialectical victory. If however most people know that modern architecture means something special, an architecture to be differentiated from the mass of contemporary building, surprisingly few people even among those who pay some lip-service know just what is implied. For this reason such remarkably good books as the two first books named above can be welcomed—the third, the monograph on Mendelsohn's work, is good, too, but less polemical and its place in the literature of modern architecture not quite that of the other two. During the last 20 years, in which time modern architecture (whatever its virtues or vices) has established itself as the outstanding architecture of almost all of the progressive democracies, there has been a constant flow of books and articles about it but, strange to say, never before Mr. Richards' *Pelican Introduction to Modern Architecture* has there been a simple, clear, general book on the subject for the English public. There have been books on modern houses and on other special types of buildings and there have been discursive arguments for a new architecture and some shorter critical studies, the best being Prof. Russell Hitchcock's introduction to the Museum of Modern Art English Architecture Exhibition—but, what Mr. Richards has given us is different both in quantity and quality. His *Introduction* is exactly what it says it is—an introduction "to describe to people who do not pretend to know anything about architecture, how these new buildings come to look as they do, why they are different for other reasons than for the sake of being different, and why their designers believe them to be the forerunners of a new architecture of the future."

Which, for a book as good as this, is much too modest an introduction because, if it really succeeds in explaining how and why to these questions the book is one to be read not only by those "who do not pretend" but more especially by just those people who as devotees or protestants are constantly pretending that they know all about modern architecture. For simplicity and directness of style, clarity of thought and

honesty in meeting points Mr. Richards could hardly have done his task better. This is saying a lot, but Mr. Richards and his publisher have given a lot, including 42 admirable illustrations for our sixpennyworth and praise is fully deserved.

In the first chapters—which are perhaps the most important and the part of his task that Mr. Richards has fulfilled with outstanding success—a general argument is developed why there is now this special contemporary architecture called modern and what it is. One by one he considers every point of debate and meets in a direct simple way the questions which anyone discussing the subject must ask: functionalism and aestheticism (with an excellent analysis of the contrasting qualities of the work of Gropius and le Corbusier; architecture and machinery and new materials and methods, politics and sociology and so on. Next there is a brilliantly concise historical survey of the period of the "pioneers" and in two chapters surveys of immediate pre-war modern work in Europe and Great Britain, with a concluding series of notes on the illustrations.

A good sixpennyworth which should be really helpful to anyone interested in contemporary architecture whether ancient or modern, professional or lay.

The book by Alfred Roth has been in preparation for many years and, like Mr. Richards' book, comes out rather unfortunately just too late for its full contribution to be realised.

Its outstanding value lies in the factual analyses of a carefully chosen group of twenty modern buildings, some large, some small, in many countries. These analyses are all on a uniform basis, each building having its spatial planning, technical features, economic factors and aesthetic features stated factually. No attempt is made in the analysis to force conclusions but every fact is given to enable conclusions to be formed. The photographs are well chosen and the plans and sections clear without exception.

The whole of the book's 230 pages consists of these analyses except for a few pages of introduction, a chapter entitled the Reality of the New Architecture, which gives a brief excursion to the vividly alive enthusiasms of the author and his collaborators.

Mr. Richards and Mr. Roth have given us two of the most important books on modern architecture yet written—too late alas for their full effect to be felt because not even in those countries nominally at peace can there be much architectural activity; yet, as a leaflet issued with the Swiss book says. *The New Architecture*, planned as a handbook for practising architects "has been transformed by the tragic events of our day into a document of humanity collaborating in a common task such as will one day arise out of the chaos . . . may it contribute to the carrying over the values of constructive work from a present of destruction into the period of the coming reconstruction."



There is not room for more than a brief notice of Mr. Whittick's monograph on the work of Eric Mendelsohn—an interim report only of one of the most brilliant careers, sparkling with individual genius, in the history of modern architecture. It is not an easy task to write simply and critically of a living artist but Mr. Whittick has fulfilled his task admirably.

Those brilliant hopeful pre-war days may still be for us :

" Spots of time

That with distinct pre-eminence retain

A renovating virtue, whence—depressed

By false opinions and contentious thought,

## SOME OTHER BOOKS

### SPECIFICATION, 1940

*SPECIFICATION, 1940. 42nd year. Edited by F. R. S. Yorke. Sm. fo. 811 pp. inc. adverts. Arch. Press, 1940. 10s. 6d.*

The general plan of *Specification* is too well known to need description here. The greater part of the work on the current volume was done before the war, so the quality is in no way, and the size only slightly, diminished. This year there are no special introductory chapters, and the work starts with the preliminary items of a job. Mr. Yorke in his preface states that the sections that have received most revision this year are Roads and Footways, Carpenter and Joiner, Heating and Ventilating Engineer, Ironmonger, Plasterer, Metal Worker and Roofer.

Many of the advertisers include useful data in their advertisements.

After the war building technique will certainly have changed considerably ; Mr. Yorke will, we hope, be free then to make the biggest and more important revision of *Specification* than any he has yet had to undertake.

### RAMMED EARTH BUILDING

*FERROCRETE : BUILDING WITH RAMMED EARTH-CEMENT. By Francis Macdonald. 8vo. 46 pp. Published by Author. 1939. Chester-town, Maryland, U.S.A. 1939. 8s.*

The author describes "rammed earth-cement building," a pisé-de-terre system of building with an admixture of cement adjusted carefully to the quality of the soil and the detail type of structure. The method, it is claimed, is almost as cheap as pisé but provides a wall impervious to water and more durable and hard. Rammed earth-cement can be used for the complete wall or as a facing "plate" to an ordinary pisé wall.

The report, which is based on scientific research at the Experiment Station, Brookings, South Dakota State College, is illustrated with photographs and diagrams of experimental structures and building plant, including shuttering, and includes some designs for small rammed cement-earth houses.

### HARDWOODS

*NOMENCLATURE OF HARDWOODS, including Botanical Names and Sources of Supply. British Standard 881-1939. 8vo. 74 pp. 1939. London: Brit. Stand. Inst. 3s. 6d.*

In 1935 the British Standards Institution published a Standard Nomenclature for Softwood (B.S. No. 389-1935) dealing with 74 species. The New British Standard, which deals with no fewer than 240 species of hardwoods of actual or potential commercial importance in this country, has been compiled by representatives of Government Departments and scientific and industrial organisations, thus assuring that its application will be general.

The basic principle upon which the nomenclature has been compiled was to establish a single standard name for any one timber, and to restrict that name to one timber only.

Besides the standard name and the name of the botanical species,

Of aught of heavier or more deadly weight,

—our minds

Are nourished and invisibly repaired."

The movement of architectural thought must retain a continuity through the war which will not make useless the work of those who were building and reasoning in the inter-war period and who seemed just before war began to be evolving a coherent contemporary architecture. For us now the pre-war period is "a spot of time" that has not lost its renovating virtue, that "efficacious spirit"—Wordsworth continues "that gives profoundest knowledge to what point, and how, the mind is lord and master."

information is given of the sources of supply and a comprehensive list of synonyms as applied to each species, not only at home but also in the country of origin and elsewhere where reference to the timber is of commercial importance.

The list given in this new British Standard is the result of considerable research, and is likely to prove helpful in identifying timbers, especially when use is made of the index with its complete cross references.

### THE CREEP OF CONCRETE UNDER LOAD

*STUDIES IN REINFORCED CONCRETE—IV. Further investigations on the creep or flow of concrete under load. Building Research Technical Paper No. 21. 8vo. 44 pp. London: H.M.S.O. 1940. 1s.*

The Department of Scientific and Industrial Research has issued a further paper in the series of studies on reinforced concrete, which deals with an investigation at the Building Research Station on the creep or flow of concrete under load. Much of the work described was done in co-operation with the Reinforced Concrete Association. The subject was first considered in Building Research Technical Paper No. 12, published in 1930. Since that time the scope of the investigation, which originally related to the longitudinal movements resulting from loading in compression, has been widened to include creep in pure tension, lateral movements under compression, and the effect of creep on the deformation and ultimate strength of reinforced concrete beams.

Some of the test results now published relate to specimens which have been maintained under load for over seven years. Those for Portland cement concretes indicate in all cases that the creep is proceeding at a steadily decreasing rate, and, for each concrete, is tending to a limiting value. Thus the increase in creep from one to five years under load is only about one-fifth of the movement during the first year for specimens loaded at the age of one month.

A series of simple tests showed that at stresses higher than the normal working values, the creep cannot be assumed to be proportional to the applied stress, but the results indicated that the mechanics of the deformation was similar for all stresses. Tests have been carried out to discover the effect of the water content of the concrete, the fineness of the cements, the sharpness of the aggregate, and the preliminary storage on creep. A section of the paper deals with the redistribution of stress in reinforced concrete columns and beams.

To provide an example of the movements that occur in practice as the result of the shrinkage and creep of concrete, measurements were made periodically for over eight years of the vertical and horizontal deformation of one of the reinforced concrete arches of a large hall in London. An analysis of these measurements is included in the paper.



## PITHEAD BATHS

MINERS' WELFARE, 1938. *The 17th Annual Report of the Miners' Welfare Committee.* 4to. 124 pp. London. 1939. H.M.S.O.

In 1938 the Miners' Welfare Fund spent £677,000, or 62 per cent., of their total income on building pithead baths and another £187,000 on work connected with the provision of recreation facilities which involves considerable architectural work. By the end of 1938 baths had been provided for 400,000 persons at 313 collieries, but still the demand for baths is so great that if the Government had not been able to impose an additional levy of ½d. per ton for five years on coal raised, the fund would have become insolvent if the needs were to be met. The resources possessed by the committee now are considered sufficient to provide for all present applicants before 1943—but since many pits have not yet applied for baths the need is certain to increase. The place, therefore, of the architects in the Miners' Welfare organisation is one of first-class importance and, as the architectural world has known for a long time, the work of the architects is in fact of first-class quality.

No Government architectural department, local or national, had a reputation equal to that won for his department by Mr. J. H. Forshaw, and now that Mr. Forshaw has gone to

the L.C.C., maintained by Mr. C. Kemp, who has been his deputy for many years.

The Annual Report of the Fund is always clearly presented and generously illustrated. This year especial prominence is given to district reports which help to stimulate progress by making the difference between the response from various localities clear. The illustrations include photographs of over 20 baths and a large number of sports pavilions. There evidently is no falling off in the beauty and quality of the work. Of course, each year the brilliance of the work of the architects' department becomes dimmed by the consistency of their quality and style. This is inevitable and in almost every way good. Mr. Forshaw having collected a first-rate team of assistants was content to continue with them, and to maintain or it might be said having created to maintain a stylistic norm. This bluff squarishness has all the hardness, the "no nonsense" of industry, but it is at the same time humane, or almost always so. Just occasionally it seems from the photographs that a touch of inappropriate monumentality has pushed its way in; but this is difficult to judge fairly because this monumentality may often be just what is wanted to adjust the scale of the baths to the aggressive æsthetic powers of other pithead buildings and the wild mountain scenery such as that shown in the fine picture of Pen y Dyffryn.

## Review of Periodicals—(Continued)

This review refers to the more important articles in journals received by the library. Journals are not in the loan library but some articles can be photostatted at the reader's cost. Information about prices and publishers of journals will be given by the Librarian.

The sequence of subjects has now been approximated more closely to that of *Accessions to the Library*; educational buildings now follow religious and precede domestic, and building science comes after all the architecture categories; but building types as a whole still start the list with other architectural sections following them. The "General" heading has now been split into appropriate subjects.

It is assumed that an article relating to an important individual new building is fully illustrated unless otherwise stated.

## TRANSPORT

ARCHITECTURAL REVIEW, 1940 Feb., p. 49:  
Underground station, St. John's Wood, by S. A. Heaps [L.].

ARCHITECT AND BUILDING NEWS, 1940 Feb. 23, p. 210:  
Depot on the N.E. Trading Estate (for Cadbury & Fry jointly); by Cackett, Burns Dick & MacKellar [FF.].

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1940 Mar., p. 61:  
Warehouse and offices (place unstated) for meat supplies, by W. E. Hollins [L.].

ARHITEKTURA S.S.S.R. (Moscow), 1940 Jan. (No. 1):  
Multi-storey garage buildings: designs by M. A. Minkus and other architects, with analysis and circulation diagrams, and foreign examples—articles by M. Minkus and L. Davidovich.

JOURNAL OF THE INSTITUTION OF CIVIL ENGINEERS, 1940 Feb. (No. 4), p. 305:  
Aero-hangar (structural) design: article, with diagrams, by A. M. Hamilton and E. B. Cocks.

ARCHITECT AND BUILDING NEWS, 1940 Mar. 1, p. 230:  
ARCHITECTS' JOURNAL, Feb. 29, p. 229:  
ARCHITECTURAL DESIGN AND CONSTRUCTION, Mar., p. 60:  
BUILDER, Mar. 15, p. 339:  
BUILDING, Mar., p. 55:

"Link trainers": stationary units for training air force pilots, groups of units including cycloramas designed by R. Myerscough Walker.

## INDUSTRIAL

JOURNAL AND TRANSACTIONS OF THE SOCIETY OF ENGINEERS, 1939 Oct.-Dec. (No. 4), p. 145:  
Factory design: articles by Hal Gutteridge and Herbert Chatley.

ARCHITECTURAL RECORD (New York), 1940 Feb., p. 81:  
Factories special issue: general article, with typical production and assembly diagram; examples in U.S.A. of scales, motor, can, and engine factories by Albert Kahn, Inc., L. R. White, jr., and the Austin Co.; the Aspro factory in Bucks. by Raymond McGrath [A.]; and an analysis of industrial and staff equipment.

ARCHITECTURE ILLUSTRATED, 1939 Dec., p. 121:  
Factories at Brislington, Bristol (architect not stated); two on the Bath Road, Bucks, one by W. H. L. Price [L.]; at Waddon (Croydon), by Fuller Hall & Foulsham; and near Leyton, by Wallis Gilbert & Partners [FF.].—photographs.

ARCHITECTURE ILLUSTRATED, 1940 Jan., p. 12:  
Factory at Reading, by Wallis Gilbert & partners [FF.], and two in Elstree Way, by G. A. Warren and by C. E. Hartshorne and R. S. Morris [A.]; exteriors.

MONATSHEFTE FÜR BAUKUNST UND STÄDTBAU (Berlin), 1939 Oct. (No. 10), p. 305; 1940 Jan. (No. 1), p. 5:  
Factory buildings, Düsseldorf, for the Mannesmannröhren works, by H. Vöth; repair works, foundries, apprentices' buildings, and canteens, by O. Biskaborn.

- MODERNE BAUFORMEN (Stuttgart), 1939 Dec., p. 561;  
 MONATSHEFTE FÜR BAUKUNST UND STÄDTEBAU (Berlin), 1940  
 Feb. (No. 2), p. 37:  
 Fire-extinguisher ("Total") works, Berlin, renovation and extension, by E. Eiermann.  
 DE 8 EN OPBOUW (Amsterdam), 1940 Mar. 2, p. 41:  
 Three new factories in Holland.  
 SCHWEIZERISCHE BAUZEITUNG (Zürich), 1940 Jan., p. 5:  
 Twine factory in reinforced concrete, by A. Staub: studies and diagrams of roof lighting and construction.  
 ARCHITECTURAL RECORD (N.Y.), 1940 Feb., p. 51:  
 Milk transfer station for can-washing and tank-filling, Enfield, U.S.A., by C. W. Murphy, staff architect.  
 BUILDER, 1940 Feb. 2, p. 155:  
 Publishing offices, Bradford, Yorks., with separate sports and canteen block and garden lay-out; Chippindale & Edmondson [LL.], architects.

### HOSPITALS, &c.

- L'ARCHITECTURE D'AUJOURD'HUI (Boulogne-sur-Seine), 1939  
 Sept.-Oct. (Nos. 9-10):  
 Hospitals: special number.  
 ARCHITECTURAL RECORD (New York), 1939 Dec., p. 77:  
 Hospital planning: full article, with diagram and specimen plans and photos of various units.  
 BUILDER, 1940 Mar. 22, p. 361:  
 Royal Infirmary, Edinburgh, extensions: maternity wing and nurses' home—T. W. Turnbull, architect.  
 ARCHITECT AND BUILDING NEWS, 1940 Mar. 1, p. 227:  
 Hospital, Greenwich (Miller General): out-patients' department: by Pite, Son & Fairweather [FF.].  
 ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 97:  
 Hospital, Potters Bar, by Marshall & Tweedy [FF.].  
 ARCHITECTS' JOURNAL, 1939 Jan. 4, p. 13:  
 Hospital at Warrington: extensions, by Geoffrey Owen and J. W. Barrow (William and Segar Owen), including nurses' home—with detail plans and photographs.  
 L'INGEGNERE (Milan), 1940 Jan. (No. 1), p. 8:  
 Hospital centre for the Royal Marine, Italy, competition designs, including axonometric analyses: article by G. Lenzi.  
 ARCHITECT AND BUILDING NEWS, 1940 Feb. 2, pp. 139, 129:  
 Hospital at Haifa, Palestine (part of a town-planning scheme), by Erich Mendelsohn (E. Kempinski, consulting engineer).  
 ARCHITECT AND BUILDING NEWS, 1940 Mar. 15, p. 261;  
 ARCHITECTURAL REVIEW, 1940 Feb., p. 61:  
 The Hebrew University Medical Centre on Mt. Scopus, Jerusalem, including separate blocks for nursing and medical schools: Erich Mendelsohn, architect.  
 ARCHITECTURE ILLUSTRATED, 1940 Feb., p. 24:  
 Hospital for women, Nottingham, extensions; by Bromley, Cartwright & Waumsley [FL.],—photos.  
 ARCHITETTURA (Milan), 1940 Jan., p. 1:  
 Maternity home, Monterotondo, by E. Rossi.  
 OFFICIAL ARCHITECT, 1940 Feb., p. 82:  
 Hospital lighting: wall fitting adaptable either on bracket as an indirect light, inverted on bracket as a reading lamp, or by hand, on a flexible cable, as an inspection lamp: designed for St. Richard's Hospital, Chichester, by C. G. Stillman [F.], architect to W. Sussex C.C.  
 DE 8 EN OPBOUW (Amsterdam), 1939 Dec. 23, p. 279:  
 Deaconess-hospital, Rotterdam, extensions—Brinkman & Van den Broek, architects.  
 SCHWEIZERISCHE BAUZEITUNG (Zürich), 1940 Feb. 3, p. 58:  
 "Sanatorium village," Sondalo im Veldin—group of multi-storeyed pavilions on an elevated site: by D. Castiglioni.  
 TECHNIKA CHRONIKA (Athens), 1940 Mar. 1 (No. 197), p. 173:  
 Sanatorium in Greece (the "Sotérias"): new block for 300 beds by K. Kitsikès, and nurses' home by I. A. Antoniadès.  
 OFFICIAL ARCHITECT, 1940 Mar., p. 134:  
 Nurses' home, Newport, I. of W., by Sydney Gregson [A.], county architect.

- ARCHITECTURE ILLUSTRATED, 1940 Jan., p. 2:  
 Nurses' home and solarium to children's ward, Radcliffe Infirmary, Oxford, by Colclutt & Hamp: exterior photos.  
 ARCHITECTS' JOURNAL, 1940 Feb. 1, p. 138:  
 Nurses' home (for District Nursing Association), Braintree; E. Vincent Harris [F.], architect.  
 ARCHITETTURA (Milan), 1940 Jan., p. 36:  
 The operating-theatre unit in hospital planning: article with diagrams and photos, by G. Roisecco.  
 ARCHITECTS' JOURNAL, 1940 Mar. 14, p. 277;  
 ARCHITECTURAL REVIEW, Apl., p. 139:  
 Ante- and post-natal and child welfare clinic, Bilston: by Lyons, Israel and Elsom [A.A.].  
 EDUCATION, 1940 Feb. 23 (Suppl.), p. 17:  
 Remand home, Middlesbrough, by F. Mellor [A.], architect to the Education Committee.

### RESTAURANTS, INNS, PUBLIC HOUSES

- ARCHITECTURAL RECORD (New York), 1940 Jan., p. 75:  
 Restaurants and bars: article, plan analyses, equipment studies and recent examples (complementary to a previous issue, January 1939).  
 ARCHITECTURAL REVIEW, 1940 Mar., p. 87, & Apl., p. 142:  
 "Fully licensed": inns and public houses (18th-19th century), illustrated article by John Piper; (Apl.) further views, showing engraved glass.  
 ARCHITECTURE ILLUSTRATED, 1940 Jan., p. 10:  
 Bridge Hotel, Sussex, by C. Beresford Marshall & partners [F., L.]: plans and photo.  
 BUILDER, 1940 Jan. 12, p. 67:  
 Inn, Churchdown, Glos. (Bat & Ball), by L. W. Barnard & partners [FF.].  
 BUILDER, 1940 Feb. 16, p. 217:  
 Inn, Coventry (The Pilot), by W. S. Clements.  
**BATHS**  
 L'ARCHITECTURE (Paris), 1939 Aug.-Sept. (Nos. 8-9), p. 255:  
 Municipal swimming pool, Bordeaux: winning competition design by Madeline and photographs as erected.  
 SCHWEIZERISCHE BAUZEITUNG (Zürich), 1940 Feb. 17, p. 75:  
 Swimming bath (covered) in Bern, by Sinner & Beyeler.  
 ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 88:  
 Six pithead baths erected by the Miners' Welfare Committee, each by its own architect, under J. H. Forshaw [F.], latterly C. G. Kemp [A.], chief architect.

### HOLIDAY BUILDINGS, CAMPS

- ARCHITECT AND BUILDING NEWS, 1940 Mar. 22, p. 293:  
 Casino (municipal) at Venice, with cinema and baths, by Eugenio Miozzi.  
 ARCHITECTS' JOURNAL, 1939 Jan. 4, p. 8, and subsequent issues (excepting 18 Jan.) to Mar. 7:  
 Temporary and semi-permanent buildings: four illustrated articles by E. Faludi and G. Samuel, including various kinds of timber and steel construction, including prefabricated units.  
 BUILDER, 1940 Jan. 5, p. 5:  
 Huts in prefabricated concrete units, including Mopin and other systems.  
 ARCHITECT AND BUILDING NEWS, 1940 Mar. 22, p. 288;  
 ARCHITECTS' JOURNAL, 1940 Mar. 21, p. 295:  
 Camp schemes (A. & B.N.) and village settlements for mothers (A.J.) from the Wimpole Street exhibition, by E. Goldfinger, Mary Crowley and Anne Parker.  
 ARCHITECTS' JOURNAL, 1940 Jan. 18, p. 65;  
 ARCHITECTURAL REVIEW, 1940 Mar., p. 101:  
 National evacuation camps: (A.J.) lay-out plans of twelve examples finished or in building (by specific architects), and full illustrations of one in Surrey, layout by Alistair G. Macdonald [F.] (timber framed, prefabricated): Burnet, Tait & Lorne, chief architects for the buildings. (A. Rev.) Illustrations of the Surrey camp.  
**PUBLIC HALLS, THEATRES, &c.**  
 DAS WERK (Zürich), 1939 Dec. (No. 12), p. 353:  
 Concert and conference hall building extension, Zürich, by M. E.

Haefeli, W. M. Moser and R. Steiger: with new music rooms, congress hall, restaurant and tea-terrace over.

SCHWEIZERISCHE BAUZEITUNG (Zürich), 1940 Jan. 13, p. 18: Theatre in a "Kurpark" (pleasure-resort area), Baden: competition designs.

ARCHITECTURAL RECORD (New York), 1940 Jan., p. 39: Theatre at Sioux Falls, with diagonally-placed auditorium, by H. Spitznagel.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1940 Apr., p. 86:

ARCHITECTURAL REVIEW, 1940 Apr., p. 137:

BUILDER, 1940 Feb. 23, p. 245:

Cinema, Oxford Street (Cinephone), part of Keystone House (under "Offices"); R. Jelinek-Karl, architect for the cinema.

BUILDER, 1940 Jan. 26, p. 129:

Cinema at Lancing, Sussex (the "Luxor"), by W. F. Granger [F.].

ARCHITECTURE ILLUSTRATED, 1939 Dec., p. 119:

Cinema at Scintion, Nottingham, by R. W. Cooper [I.]; photographs.

ARCHITECTURE ILLUSTRATED, 1940 Feb., p. 26:

Cinema, Stoke-on-Trent (Danillo), by A. Glyn Sherwin.

ARCHITECTS' JOURNAL, 1940 Mar. 7, p. 255:

Cinema at Towcester; by Sir John Brown & A. E. Henson [FF.].

L'ARCHITETTURA ITALIANA (Turin), 1940 Jan. (No. 1), p. 13:

Cinema and office building, Oslo, by Blakstad & Munthe-Kaas.

### SPORTS BUILDINGS

L'ARCHITECTURE (Paris), 1939 Aug.-Sept. (Nos. 8-9), p. 272: Stadium (municipal), Bordeaux, by J. d'Welles.

BUILDER, 1940 Feb. 2, p. 159:

Sports pavilion, Northolt, by A. Marshall Mackenzie & Son [FF.].

ARCHITECTS' JOURNAL, 1940 Feb. 1, p. 140:

ARCHITECTURAL REVIEW, 1940 Mar., p. 103:

Sports pavilions for local schools and adult college, Bournemouth, by W. L. Clowes.

BAUMEISTER (Munich), 1939 Nov. (No. 11), p. 317:

Skiing schools for the police, by the Bavarian building organisation, at Sudelfeld and Oberjoch.

ARCHITETTURA (Milan), 1939 Dec., p. 693:

Group of buildings for the local branch at Montesacro (Aniene garden city) of the Italian Lictorial Youth organisation, with theatre, gymnasium and swimming bath, and separate domestic economy school; by G. Minnucchi.

COSTRUZIONI, CASABELLA (formerly CASABELLA) (Milan), 1940, p. 30:

Stadium and sports club building, Narni, by Agnoldomenico Pica.

ARCHITECT AND BUILDING NEWS, 1940 Mar. 15, p. 267:

Gymnasium and dining block for a sports centre, with existing athletics hall and school, at Ollerup, Denmark; by Richard Fever [I.].

SCHWEIZERISCHE BAUZEITUNG, 1940 Jan. 27, p. 43:

Racecourse grand-stand at Yodo, near Kyoto, with steel-frame canopy, by Takeo Yasui.

### EXHIBITIONS, LIGHT BUILDINGS, BRIDGES

ARKKITEHTI (Helsinki), 1939, No. 10, p. 145: Finnish "everyday-things" exhibition.

ARKITEKT (Istanbul), 1939, Nov. 9-10, p. 198:

Turkish international exhibition—fully illustrated.

ARCHITECTURAL RECORD (N.Y.), 1940 Feb., p. 39:

Exhibition building—a permanent structure adjoining the Fair ground—at Shreveport, U.S.A., by E. F. Neild, D. A. Somdal, & E. Neild, jr. A circular building round a courtyard, with museum and auditorium wings.

ILLUSTRATED CARPENTER AND BUILDER, 1940 Feb. 2, p. 156, and subsequent issues:

Light buildings in war time: articles by Edgar Lucas.

ANNALES DE L'INSTITUT TECHNIQUE DU BÂTIMENT ET DES TRAVAUX PUBLICS (Paris), 1939 Sept.-Oct. (No. 5), p. 1:

Bridges in France and Switzerland, 1899 to date, in steel and reinforced concrete: views and diagrams accompanying an article on the Direct measurement of strains in constructed works, by M. Ros, of Zürich.

SCHWEIZERISCHE BAUZEITUNG (Zürich), 1940 Jan. 6, p. 2: Bronx-Whitestone suspension bridge, New York—O. H. Annemann, engineer: article, photographs and diagrams.

### RELIGIOUS, SEPULCHRAL

KENTIKU ZASSI (JOURNAL OF THE INSTITUTE OF JAPANESE ARCHITECTS), 1939 Nov., p. 1304:

Mosques in Mongolia, illustrated article by Z. Murata.

ARCHITECTURE ILLUSTRATED, 1940 Apr., p. 52:

BUILDER, 1940 Mar. 1, p. 270:

Restoration, Savoy Chapel, London: by M. W. Matts [L.].

ARCHITECT AND BUILDING NEWS, 1940 Mar. 1, p. 222:

College (of the Venerable Bede) chapel, Durham: by the Hon. John Seely and Paul Paget [F.].

BOUWBEDRIEF EN OPENBARE WERKEN (The Hague), 1940 Feb. 16, p. 49:

Some churches in reinforced concrete, in various countries: photos, with text by J. G. Wattjes.

BUILDER, 1940 Jan. 5, p. 9:

Church, Teddington (St. Mark), by Cyril A. Farey [A.].

BUILDER, 1940 Jan. 12, p. 53:

Church, Weston Green, Surrey (All Saints), by Edward Maufe [F.].

ARCHITECTS' JOURNAL, 1940 Jan. 18, p. 86:

Church at Hove (Bishop Hannington Memorial), by Edward Maufe [F.].

BUILDER, 1940 Feb. 23, p. 241:

Church, Wyther, Leeds (Venerable Bede), by Gribbon, Foggitt & Brown [FF.].

BUILDER, 1940 Mar. 15, p. 333:

Church at Sheffield (Millhouses), by J. Amory Teather [F.].

PENCH. POINTS (New York & Stamford), 1940 Feb., p. 59, &c.:

Churches issue: examples at New York (Epiphany), by Wyeth & King with Eugene W. Mason; in Texas, a college chapel, by O'Neil Ford & Swank; Atlanta, a co-cathedral, by H. D. Dagitt & Sons, with lighting fittings concealed in ring-shaped vault bosses; and others, plus a 13th-century Finnish church, accompanying an article by T. F. Hamlin.

ARCHITECT AND BUILDING NEWS, 1940 Feb. 2, p. 134:

ARCHITECTS' JOURNAL, 1940 Mar. 7, p. 262:

Catholic church, Newbridge, Mon., with priest-house, by P. D. Hepworth [F.].

SCHWEIZERISCHE BAUZEITUNG (Zürich), 1939 Dec. 23, p. 305: Enlargement of a Reformed church, and new hall, Neuhausen a. Rh.: competition designs.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 73:

Congregational church and halls, Potters Bar (design; held up), by Marshall & Tweedy [FF.].

WERK (Zürich), 1940 Jan., p. 1:

Christian Science church (with Sunday school building), Zurich, steel-framed: A. Kellermüller and H. Hofmann, architects.

ARCHITECT AND BUILDING NEWS, 1940 Mar. 22, pp. 279, 283:

Guildford Cathedral: progress photographs of the first (eastern) half, nearing completion; Edward Maufe, architect.

ARCHITECTS' JOURNAL, 1940 Feb. 22, p. 199:

Cathedral proposed for Wellington, N.Z.: design by Cecil Wood [I.].

ARCHITECTS' JOURNAL, 1940 Feb. 1, p. 146:

Crematorium chapel of memory, Golder's Green, by Mitchell & Bridgewater [I.I.], assisted by E. G. Mobery and L. W. Aked.

MODERNE BAUFORMEN (Stuttgart), 1940 Mar., p. 123:

Crematorium, Cologne, by H. H. Lüttgen: photos.

ARCHITECTS' JOURNAL, 1940 Mar. 21, p. 311:

Church hall (Abp. Amigo Jubilee) adjoining Pugin's St. George's (R.C.) Cathedral, Southwark, with axonometric detail; by Robert Sharp [F.].

### SCHOOLS

L'ARCHITECTURE D'AUJOURD'HUI (Boulogne-sur-Seine), 1939, No. 11-12:

Schools issue: including articles on class-room planning for stages of teaching, air and light, and recent examples of schools of all grades in various countries.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1940 Feb., p. 17:

Cranford Park School, Hayes, Middlesex—photos: W. T. Curtis

[F.], county architect, H. W. Burchett [A.], assistant for educational buildings.

ARCHITECTS' JOURNAL, 1940 Jan. 11, p. 42 :  
School, Newbury (St. Bartholomew's), additions : by Eric A. Roberts [A.].

ARCHITECTURE ILLUSTRATED, 1940 Mar., p. 39 :  
Bedford School for Girls, by Oswald P. Milne [F.] : plans and views.

BYGGE KUNST (Oslo), 1939, No. 11, p. 201 :  
"Folkhighschool" and "landorganisation" school, Sörmarka, of timber-built blocks, by K. Knutsen ; and competition designs for schools at Tromsø and Kongsberg, showing lay-outs.

BYGGMÄSTAREN (Stockholm), 1940 Jan. 26 (No. 2), pp. 17, &c. :  
School number : including government supply for essential school building, article by Curt Björklund, with typical plans ; Eriksdal schools, near Stockholm, by N. Ahrbom & H. Zimdahl—specific rooms fully detailed ; "folk" (elementary) schools at Säfle (sketch plan and model), by G. Wejke & K. Odéen, and Fredhäll, by P. Hedquist.

BYGGMÄSTAREN (Stockholm), 1940 Feb. 9 (No. 3), p. 45 :  
Schools of various grades in Denmark, by Paul Hedquist and others, with a school gymnasium ; the village college, Impington (W. Gropius & E. Maxwell Fry [F.]), is also noticed.

ARCHITECTURAL RECORD (New York), 1940 Jan., p. 35 :  
School at Ottawa, Illinois, by L. H. Gerding.

ARCHITECT AND BUILDING NEWS, 1940 Feb. 23, p. 201 :

EDUCATION, 1940 Feb. 23 (Suppl.), p. 21 :  
Elementary schools, Belfast, by R. S. Wilshire [F.] : (A. & B.N. : Cliftonville Road ; (Educn. : Edenderry. Photos.

BUILDER, 1940 Jan. 12, p. 63 :  
Parkhill (junior and infant) School, Ilford : by L. E. J. Reynolds, borough engineer and education architect, with R. C. Edleston [A.].

ARCHITECTS' JOURNAL, 1940 Feb. 22, p. 209 :  
Elementary school, South Shields, by T. A. Page, Son & Bradbury [F.].

EDUCATION, 1940 Feb. 23 (Suppl.), p. 21 :  
Elementary school at Newcastle-upon-Tyne, by F. W. Harvey [F.].

ARKITEKTEN (Copenhagen), 1940 No. 1, p. 1, &c. :  
Children's care buildings : article, including nursery schools at Uterslev, by E. Thomsen, and Zürich, by Kellermüller & Hofmann.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 71 :  
Infants' school, Guiseley, Leeds (design ; held up), by Pakington and Enthoven.

L'EPOQUE (Brussels), 1940, No. 3, p. 29 :  
"Infant colony" (nursery school) by the Oeuvre Nationale de l'Enfance, East Dunkerque, by Maurice Haec, with Ch. J. Duyver.

EDUCATION, 1940 Jan. 26, School constr., p. 7 :  
Junior school, Moreton, Wallasey, by Quiggin & Gee [FF.].

ARCHITECT AND BUILDING NEWS, 1940 Feb. 16, p. 184 :  
Senior school, Boscombe, Bournemouth, by W. L. Clowes.

#### COLLEGES, TECHNICAL SCHOOLS, LABORATORIES

BUILDER, 1940 Jan. 19, p. 101 :  
Imperial Service College, Windsor : Kipling Memorial Buildings, by Clyde Young [F.] with Bernard Engel.

ARCHITECTS' JOURNAL, 1940 Jan. 18, p. 84 :  
Worcester College, Oxford : residential block, by W. G. Newton [F.] & partners.

ARCHITECT AND BUILDING NEWS, 1939 Jan. 5, p. 7 :  
Hendon Technical Institute (further illustrations), a large scheme with communal facilities, by W. T. Curtis [F.], architect to M.C.C., assisted by H. W. Burchett [F.], architect for educational buildings.

OFFICIAL ARCHITECT, 1940 Mar., p. 134 :  
Technical College for S. Dorset, Weymouth ; by H. E. Matthews [A.], county architect.

EDUCATION, 1940 Jan. 26, School constr., p. 2 :  
Sunderland Technical College extensions, by O. Hall Mark [L.], including library and mining department.

L'ARCHITECTURE (Paris), 1939 Oct.-Dec. (Nos. 10-12), p. 307 :  
College of France, in the Place Marcellin-Berthelot : new amphitheatre and laboratories blocks, in reinforced concrete, by Albert and Jacques Guilbert.

ARCHITECTS' JOURNAL, 1940 Jan. 18, p. 77 :

ARCHITECTURAL REVIEW, 1940 Mar., p. 104 :  
Chemical laboratories in West Sussex, by O'Donoghue & Halfhide [FF.].

PUBLIC WORKS OF SOUTH AFRICA, 1940 Jan., p. 13 :  
Research laboratory (low-temperature), Cape Town (two blocks)—architect not stated.

ARCHITECT AND BUILDING NEWS, 1940 Mar. 8, p. 243 :  
Film laboratory, America (place unstated), by Bertram Teitelbaum. Dust- and fireproofing were essential factors.

#### MUSEUMS, LIBRARIES

BYGGMÄSTAREN (Stockholm), 1939 Dec. 23 (No. 39), p. 483 :  
Art museums : article (by G. Lettsröm) with many comparative cross-sections and interior views of examples showing lighting : also illustrations of recent museums, one with concert hall, another with large machine hall.

ARCHITECT AND BUILDING NEWS, 1940 Feb. 9, p. 163 :  
Art museum, Båle, by Rudol Christ.

ARCHITECTURAL RECORD (New York), 1940 Jan., p. 29 :  
Museum of Art, Portland, U.S.A. : completion of block, with specialised top and top-side lighting, by A. E. Doyle & associate.

ARCHITECTURAL RECORD (New York), 1939 Dec., p. 31 :  
Zoo at Dudley Castle, Staffs. ; Tecton, architects.

LIBRARY ASSOCIATION RECORD, 1940 Feb., p. 39 :

NATIONAL BUILDER, 1940 Jan., p. 155 :  
Branch library, Leeds (Cross Gates), by C. Castelow [A.], with spacious interior of domestic character (article by J. T. Gillett, plan, and photos in L.A.R.).

BOUWKUNDIG WEEKBLAD ARCHITECTURA (Amsterdam), 1940 Feb. 3, p. 37 :

BOUWBEDRIJF EN OPENBARE WERKEN (The Hague), 1940 Feb. 2, p. 29 :

Office and shop building for "The Netherlands of 1845" at Arnhem, by Dudok. (Article in Bouwbedrijf by J. G. Wattjes.)

#### HOUSES

SOUTH AFRICAN ARCHITECTURAL RECORD, 1940 Feb., p. 33 :  
Design of dwelling units with regard to regional differentiation : article by R. J. Neutra, with illustrations of his designs, including that for a waterproof plywood house.

ARCHITECTURAL REVIEW, 1940 Jan., p. 23 :  
House (semicircular-fronted) at Cannobbio, on Lake Maggiore, by Luigi Vietti.

FORM (Stockholm), 1940, No. 1, p. 9 :

Gropius's house in America, by himself & Breuer.

ARCHITECTURAL FORUM (New York), 1939 Dec., p. 455 :  
Timber and part-timber houses in America.

PENCIL POINTS (N.Y. & Stamford, Conn.), 1940 Jan., p. 44 :  
Medical building for a group of physicians with common service rooms, Ames, Iowa, by Kimball & Bowers.

ARCHITECTS' JOURNAL, 1940 Feb. 22, p. 212 :

Country house in Bohemia, by J. Fragner.

COSTRUZIONI, CASABELLA (formerly CASABELLA) (Milan), 1940 Jan., p. 26 :

Two country houses by Aalto, at Noormarku and Helsinki.

BUILDER, 1940 Feb. 23, p. 234 :

Four-family houses—the "Ardmore experiment"—by Frank Lloyd Wright (already noted, p. 40).

#### HOUSING

JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS, 1940 Jan., p. 69 :

Low-rent housing : paper by N. V. Modak ; questionnaire by the Housing Sub-Committee of the (Indian) National Planning Committee, with the replies of the Indian Institute of Architects.

BUILDER, 1940 Feb. 2, p. 161 :

"Woodless houses" for Sürling : project, by T. M. Copland & Blakey.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 12, p. 37 :

Housing quarter, Lisbon, of parallel two-storeyed blocks, by Paulino Montez.

ARCHITECTURAL FORUM (New York), 1940 Jan., p. 1 :

Work of the U.S. Housing Authority, with illustrations of four



representative large schemes, two of flat-blocks, two of individual houses.

WOOD, 1940 Feb., p. 40 :  
Timber housing scheme at Polbeth, Scotland (of red cedar)—Carr & Howard [A.L.], architects : with constructional details.

COSTRUZIONE, CASABELLA (Milan), 1940 Feb. (No. 146), p. 25 :  
Rural housing ("case coloniche") on the Lombard plain, by Asnago & Vender.

#### FLATS

JOURNAL OF THE CHARTERED SURVEYORS' INSTITUTION, 1940 Feb., p. 458 :

Valuation and management of flats : paper by Anthony Clapham.  
ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 72 :  
Tenement flat blocks scheme, Southwark (Redcross St.) (design : held up), by Mitchell & Bridgewater [A.L.] for the L.C.C.

ARCHITECTS' JOURNAL, 1940 Mar. 21, p. 305 :  
Block of flats on Brixton Hill, S. London (Dumbarton Court), by Couch & Coupland [F.L.], with garage, A.R.P. shelter and roof garden in courtyard.

ARCHITECTURE ILLUSTRATED, 1939 Dec., p. 130 :  
Flats in Hook Road, near Surbiton, by Ronald Ward [A.]—photographs.

BUILDER, 1940 Jan. 19, p. 98 :  
Tenement flats, Birmingham (Emily Street), by Grey Wormum and Anthony Tripe [F.L.].

ARCHITECTURAL REVIEW, 1940 Feb., p. 72 :  
Large rooms in an early Victorian house converted into flats, Cambridge, by E. W. N. Mallovs [A.].

BUILDING, 1940 Jan., p. 14 :  
Shop and flat block, Prague, by V. Obrtel.

ARCHITECTS' JOURNAL, 1940 Mar. 21, p. 301 :  
Flats in Prague, by R. F. Podzemny.

CASABELLA (Milan), 1939 Dec. (No. 144), p. 7 :  
Scheme of flat blocks, Milan, by F. Albini, R. Camus, & G. Palanti, with full measured drawings and constructional details.

BYGGE KUNST, 1939 No. 12, pp. 221, 226, &c. :  
Flats of one-room and larger types in Oslo and elsewhere in Scandinavia, with a special study of balconies.

ARKITEKTEN (Copenhagen), 1940 Nos. 11-12, p. 161 :  
Flats in Copenhagen (?), various blocks, by Ib Lunding, Henning Hansen, and other architects.

ARCHITECTURAL RECORD (New York), 1939 Dec., p. 41 :  
Apartment houses for a steep slope, New York : scheme serviced by a vertical or funicular lift—E. A. Koch, architect.

CONCRETE, 1940 Feb., p. 94 :  
Flats, New York ("Castle Village") : reinforced concrete construction, showing sound-insulating partitions.

ARCHITECTURAL FORUM (New York), 1939 Dec., p. 412 :  
Housing scheme of numerous flat blocks on 129-acre site, Parkchester, N.Y. : with interchangeable core and wing plans.

#### TOWN HOUSES

ARKITEKTEN (Copenhagen), 1940, No. 10 :  
Street house in Denmark, with staggered and balconied upper floors, by Edvard Thomsen : three flat buildings, by Mogens Lassen, F. Schlegel & M. L. Stephensen, and Hubert Paulsen.

ARCHITECT AND BUILDING NEWS, 1940 Feb. 23, p. 206 :  
Town houses in U.S.A. : by Linton H. Young, Atlanta : and by R. Neutra with O. Winkler, San Francisco.

#### INSTITUTES, HOTELS, HOSTELS

ARCHITECTS' JOURNAL, 1940 Feb. 15, p. 183 :  
Toynbee Hall, Commercial Street (for teaching, assembly and recreation) : new block with hall, rooms and a juvenile court, by Alister G. MacDonald [F.]. (Already illustrated : see p. 87, "Theatres.")

BUILDER, 1940 Jan. 12, p. 57 :  
County Hotel, Woburn Place, by C. Lovett Gill [F.] (Richardson & Gill).

BUILDER, 1940 Mar. 8, p. 301 :  
Hotel, Halifax : by Jackson & Fox [A.].

ARCHITETTURA (Milan), 1939 Dec., p. 730 :  
Fishing or holiday hotel at Genoa, by L. Vietti.

SOUTH AFRICAN ARCHITECTURAL RECORD, 1940 Jan., p. 3 :  
WERK, Mar./Apr. (Nos. 3/4) :

Hotel, Aulanko (Finland), "the first designed by a woman architect"—Märta Blomstedt, assisted by Matti Lampén : (S.A.A.R.) article by C. Moffat.

KENTIKU ZASSI (JNL OF INSTITUTE OF JAPANESE ARCHITECTS), 1940 Jan. (No. 658), p. 93 :

Hotel in Japan planned on semi-European lines.

MODERNE BAUFORMEN (Stuttgart), 1939 Sept., p. 460 :  
Spa hotel at Yalova, Asia Minor, by Sedad Hakki Eldem [Hog. Corr. Mem.], of Istanbul.

ARCHITECTS' JOURNAL, 1940 Mar. 14, p. 285 :  
ARCHITECTURAL REVIEW, Mar., p. 79 :

Girls' hotel (Cecil Residential Club), Gower Street, by E. Maxwell Fry [F.].

#### BUNGALOWS, HOLIDAY HOUSES

COSTRUZIONE, CASABELLA (Milan), 1940 Feb. (No. 146), p. 17 :  
Mountain colony named after R. Piaggio near Genoa, by L. C. Daneri : with structural details and interior views.

TÉR ES FORMA (Budapest), 1940 No. 1, p. 8 :  
Holiday home for the Federation of Finnish Architects, by Hugo Harmia.

DE 8 EN OPHOUW (Amsterdam), 1940 Feb. 3, p. 21 :  
Holiday houses in Holland.

ARCHITECTURAL FORUM (N.Y.), 1939 Dec., p. 446 :  
Summer residence on Somes Sound, by George Howe, with cantilevered wing over the water.

#### INTERIORS, CRAFTS, FITTINGS

ARCHITECTURAL REVIEW, 1940 Jan., p. 31 :  
Interiors : the International Building Club, Park Lane and Hamilton Place, by Michael Rachlis : flat for a prince (place unnamed), by Gordon Russell.

MODERNE BAUFORMEN (Stuttgart), 1939 Oct., p. 497 :  
Interiors in Vienna : theatres by A. Popp and F. Zejmer, offices by J. Becvar and V. Ruzicka, pawnshop building by E. Kastner & F. Waage, and restaurant and flat building by K. Klaudy & G. Lippert.

ARCHITECT AND BUILDING NEWS, 1940 Mar. 8, p. 250 :  
Flat interior, Cracow : by E. Riegelhaupt.

COUNTRY LIFE, 1940 Mar. 2, p. 222 :  
A plasterer of the 17th century : John Abbott of Barnstable—illustrated article by Miss M. Jourdain.

COUNTRY LIFE, 1940 Feb. 17, p. 177 :  
Wood fires : with diagrams of "William Robinson" hearth : article by Michael Haworth-Booth.

MODERNE BAUFORMEN (Stuttgart), 1939 Dec., p. 589 :  
Tiled free-standing stoves of old German type, recent examples from the Heidelberg works.

#### HISTORY AND BIOGRAPHY

PENCIL POINTS (New York), 1939 Dec., p. 763 :  
Description of the architecture of various periods in western and south-western parts of the U.S.A., with photos, by Talbot F. Hamlin.

ARCHITECTURAL REVIEW, 1940 Jan., p. 1 :  
Hadrian's Wall, Britain : illustrated article and appeal for better preservation, by Nigel Nicolson.

COUNTRY LIFE, 1940 Mar. 23, p. 297 :  
Castle of St. George, Tripoli (now the Governor of Libya's headquarters) : illustrated article by Lt.-Col. Cyril Rocks.

COUNTRY LIFE, 1940 Jan. 6, p. 14, and following number :  
Articles (illustrated) on Lancelot ("Capability") Brown, eighteenth-century architect and landscape gardener, by Dorothy Stroud.

BUILDER, 1940 Jan. 12, p. 33 :  
Richelieu—illustrated article on this seventeenth-century town and château, by M. S. Briggs [F.].

ARCHITEKTURA S.S.S.R. (Moscow), 1939 Dec. (No. 12), p. 61 :  
A. D. Zakharov, a Russian 18th-19th cent. architect : illustrated article by G. Grimm.

ARCHITECTURAL REVIEW, 1940 Jan., p. 17 :  
Rosenborg Castle, Copenhagen : illustrated article by J. Lees-Milne.

ARCHITECTURAL REVIEW, 1940 Feb., p. 55 :  
Riber Castle—a mid-19th-century plate-glass castellated house



by John Smedley, the hydropath: illustrated article by John Coulmace.

*Costruzione*, CASABELLA (Milan), 1940 Feb. (No. 146), p. 2: Review of modern English architecture from William Morris to Tecton, illustrated, by Agnoldomenico Pica.

ARCHITECTS' JOURNAL, 1940 Jan. 18, pp. 58, 89:

Review of the work of 1919-39, by Edwin Gunn [I.] and R. Furdieux Jordan [F.]; the Year's work (1939), by C. H. Reilly both illustrated.

JOURNAL OF THE ROYAL SOCIETY OF ARTS, 1940 Mar. 22, p. 449: Architecture 1919-1939: illustrated review of the inter-war period, by Howard Robertson [F.].

ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 78:

Review of the work of 1939, accompanied by single illustrations of works already published, with dates.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 70:

"Hold up": illustrations of projected buildings postponed, with comments on suggested alternative uses if built now. (Each building is separately noted in this list.)

ARCHITECT AND BUILDING NEWS, 1940 Feb. 23, p. 196:

ARCHITECTS' JOURNAL, 1940 Feb. 29, p. 234:

BUILDER, 1940 Feb. 23, p. 237:

Illustrations and notes of the work of C. E. A. Voysey [F.].

MODERNE BAUFORMEN (Stuttgart), 1939 Nov., p. 545:

The work of Fritz Schumacher, of Hamburg: including Cologne and Hamburg town plans, government offices (in brick), school, and school gymnasium.

L'ARCHITECTURE (Paris), 1939 Aug.-Sept. (Nos. 8-9), p. 253: Recent works at Bordeaux, under J. d'Velles, architect-in-chief, including abattoir, university group, exchange, and war memorial swimming pool and stadium are noted elsewhere.

ARCHITECTURAL REVIEW, 1940 Feb., p. 37:

Pretoria, the mushroom capital: article by Hugh Casson, illustrating the less-important (including domestic) buildings.

PENCIL POINTS (New York), 1940 Jan., p. 25:

New York recent architecture, notably apartment houses, a hospital and bridges: illustrated article by Talbot Hamlin.

STRUCTURAL ENGINEER, 1940 Mar., p. 535:

Recent buildings in reinforced concrete, with structural diagrams and small photos: warehouse and flour mill at Millwall, by Leslie Turner: nurses' home, Rochford, by Frank W. Smith [I.]; distillery buildings and silos, Strathclyde, and shop and office building in Piccadilly, both by Yates, Cook & Darbyshire: article by Leslie Turner.

## PROFESSIONAL PRACTICE

JOURNAL OF THE INSTITUTION OF CIVIL ENGINEERS, 1940 Jan. (No. 3), p. 184:

Activities for improving the social and economic status of civil engineers: paper by Sir Clement Hindley.

JOURNAL OF THE R.I.B.A., 1940 Feb. 19 (No. 4), p. 92:

Party walls in London: effect of London Building Acts (Amendment) Act, 1939.

ARCHITECT AND BUILDING NEWS, 1940 Feb. 9, p. 166:

Assessment of compensation under the Acquisition of Land Act, 1919: report of Marsham Street, Westminster, arbitration case.

ARCHITECTS' JOURNAL, 1940 Jan. 18, Supp.:

Basic (pre-war) schedule of prices (for comparison with later lists), compiled by Davis & Belfield.

ARCHITECTURAL FORUM (New York), 1939 Dec., p. 473, p. 480: Effect of the war on building costs: tabulated quantities for materials in house construction based on cubic feet of the whole building.

PENCIL POINTS (New York), 1939 Dec., p. 780:

The business aspect of architecture: article, with tables or charts used in practice, by E. H. Silverman.

JOURNAL OF THE CHARTERED SURVEYORS' INSTITUTION, 1940 Feb., p. 444:

Article on the use of the description "architect" by firms under the Architects Registration Acts.

## ALLIED ARTS

HIM I SVERIGE (Stockholm), 1940, No. 1, p. 54:

Recent chair design: article, with many photos, by A. Berghman.

## BUILDING SCIENCE, INCLUDING SANITARY SCIENCE AND EQUIPMENT

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1940 Jan. p. 17 and succeeding issues:

The Components of building: condensed serial version of a work by F. E. Towndrow. The first articles deal with geology and physics of materials.

BUILDING, 1940 Dec., p. 477, and succeeding issues:

Economics in building construction: illustrated articles by R. V. Boughton, including Foundations, Concrete bases to walls (Jan.), and bases to piers and partition walls (Feb.).

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1940 Feb., p. 45: War-time problems in building: series forming an open forum for manufacturers and others, with "suggestion sheets" (No. 1 was on brickwork in lieu of timber).

BUILDER, 1940 Feb. 9, p. 182, and subsequent issues:

Roof construction for emergency purposes: articles in the series War-time building practice, by R. Cotterell Butler [I.].

ARCHITECT AND BUILDING NEWS, 1940 Mar. 15, p. 274: Thermolux-concrete roof glazing in pre-cast units.

ARCHITECTURAL RECORD (New York), 1940 Jan., p. 46:

Window types with metal frames and glass blocks.

CONCRETE, 1940 Mar., p. 128:

Shutter plates in concrete (reinforced) as a substitute for timber or steel.

CIVIL ENGINEERING, 1940 Mar., p. 72:

Underpinning: paper by R. V. Allin, with diagrams.

JOURNAL OF THE R.I.B.A., 1940 Mar. 18, p. 106:

Materials for housing in war-time: address at Housing Centre by R. Fitzmaurice.

BUILDER, 1939 Dec. 8, p. 785; Dec. 15, p. 815; 1940 Jan. 12, p. 37: and subsequent issues.

Development of materials and constructional systems as substitutes for timber: part of R. C. Butler [I.]'s series of articles on War-time building practice, with comparative diagrams.

BUILDING, 1940 Feb., p. 46:

New methods and materials, weekly commentary by A. H. Barnes [F.]: article on timberless construction.

NATIONAL BUILDER, 1940 Mar., p. 207:

The Timber shortage: suggestions for substitutes for various details.

BUILDER, 1940 Feb. 16, p. 221:

CONCRETE, 1940 Feb., p. 59:

Concrete hutments without steel or timber: design, incorporating voussioired arches, and article.

BUILDER, 1940 Feb. 23, p. 247:

Concrete hutments: design, by the Cement & Concrete Association.

ARCHITECTURAL FORUM (New York), 1940 Mar., p. 101:

Architectural prefabricated concrete slabs, with colour surfaces: article and diagrams showing manufacture.

JOURNAL OF THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 1939 Dec., and 1940 Feb., p. 481:

Air movement in timber-drying kilns: paper by W. C. Stevens and discussion.

BUILDING, 1940 Mar., p. 69:

Asbestos-cement sheeting used for unit construction, e.g., for cubicles.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 19, p. 94, and following issue:

Coade (artificial) stone, and the Lambeth factory where it was made (1769 ff.): articles by Mrs. K. A. Esdaile.

JOURNAL OF THE R.I.B.A., 1940 Feb. 19 (No. 4), p. 85:

Bricklaying in frosty weather—Building Research Station note.

ARCHITECTURAL RECORD (New York), 1939 Dec., pp. 45, 63:

Plywood, both inside and out, in a house at Redding, U.S.A.: Oscar Fisher, architect: revival of timber in building—illustrated article by Don Taylor, showing its uses as framing, structural units (including parabolic roofs), and veneer: with bibliography.

JOURNAL OF THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 1940 Feb., p. 487:

Engineering equipment of institutional buildings, such as hospitals: paper by W. Ferne.

HEATING AND VENTILATING ENGINEER, 1940 Jan., p. 286, and subsequent issues :

Estimating for heating and ventilation work : articles by L. J. Overton.

JOURNAL OF THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 1940 Jan., pp. 437, 477 :

Comfort heating as it concerns the engineer, article with graphs by E. G. Holley ; experiments on warming a room, article by N. S. Billington.

L'ARCHITECTURE D'AUJOURD'HUI (Boulogne, Seine), 1939, Sept.-Oct. (Nos. 9-10) :

Air conditioning : full article with diagrams by F. Ghilardi.

OFFICIAL ARCHITECT, 1940 Jan., p. 32 :

Garcley system of refuse disposal (using sinks and down-pipes), first introduction into England at Leeds (Quarry Hill) in a scheme of flat blocks—R. A. H. Livett, architect ; with plans of the distant disposal stations.

JOURNAL OF THE R.I.B.A., 1940 Jan. 15, p. 57 :

Weatherings—illustrated article by E. L. Bird [A.] and William Allen [A.].

PROCEEDINGS, AMERICAN SOCIETY OF CIVIL ENGINEERS, 1940 Feb., p. 247 :

Waterproofing in a marine application : sealing a lagoon lining with salt, article with diagrams by C. H. Lee.

ARCHITECTURAL RECORD (New York), 1940 Jan., p. 65 :

Control of sound in buildings : articles with diagrams and photographs of types of reverberation control.

A.R.P.

L'INGEGNERE (Milan), 1939 Dec. (No. 12), p. 1001 :

The Air-raid-resisting building : article, with aerial views showing recognisable features, by G. Stellingwerff.

STRUCTURAL ENGINEER, 1940 Feb., p. 521 :

A.R.P. applied to future buildings : discussion.

JOURNAL OF THE AIR RAID PROTECTION INSTITUTE, 1940 Feb., p. 88 :

A.R.P. in Catalonia, by R. Perera, chief engineer to that province (illustrated article).

L'ARCHITECTURE D'AUJOURD'HUI (Boulogne, Seine), 1939 Sept.-Oct. (Nos. 9-10), p. 60 :

Reinforcement of cellars, chiefly by steel framing : illustrated article by F. Vitale.

BUILDER, 1940 Feb. 9, p. 191 :

Air shelter for Chiltern Court, Baker Street, by S. A. Heaps [L.].

BUILDER, 1940 Jan. 12 :

Shelter in Marylebone Town Hall, by Sir Edwin Cooper [F.] : ventilated shelters for an engineering company.

ARCHITECT AND BUILDING NEWS, 1940 Jan. 12, p. 35 :

Basement shelters in Wandsworth : lecture by C. F. de Steiger.

BUILDING, 1940 Jan., p. 6 :

Air-raid shelter in reinforced concrete : scheme by Cyril Helsby.

CONCRETE, 1940 Jan., p. 3 :

Structural design of shelters : article, with diagrams, by D. H. Lee.

BUILDER, 1940 Jan. 12, p. 69 :

Surface shelters in Trafalgar Square and Grosvenor Gardens : J. Rawlinson, city engineer and surveyor : Colclutt & Hamp, consulting architects.

BUILDER, 1940 Feb. 16, p. 219 :

A.R.P. subways under road, and shelter, Leeds : W. S. Cameron, city engineer.

BUILDER, 1940 Mar. 15, p. 337 :

First-aid post and cleansing station, Erith, by J. H. Clayton, borough engineer.

BUILDER, 1940 Mar. 1, p. 276 :

A.R.P. depot and shelters, Hull : William Morris, city engineer.

ROYAL ENGINEERS' JOURNAL, 1940 Mar., p. 7 :

Glass for A.R.P. purposes—protection of windows, etc. : account of tests, with photos.

BUILDING, 1940 Feb., p. 43, and subsequent issues :

Ventilation of air-raid shelters : articles, with diagrams, by F. J. Samuely.

HEATING AND VENTILATING ENGINEER, 1940 Mar., p. 322 :

Heating, and ventilation with light obscuration : war-time working conditions, illustrated report of a conference by the Industrial Welfare Society and London School of Hygiene.

JOURNAL OF THE AIR RAID PROTECTION INSTITUTE, 1940 Feb., p. 140 :

Blacking-out and protection of windows : article by H. Ryle [A.], chief maintenance surveyor to H.M.O.W., with constructional details.

BUILDER, 1940 Mar. 8, p. 298 :

Black-out and ventilation : first of a second series of articles under the heading War-time building practice, by R. C. Butler [A.].

TOWN AND COUNTRY PLANNING, GARDENS

NUESTRA ARQUITECTURA (Buenos Ayres), 1939 Sept. (No. 9), following p. 306 (supplement "Austral") :

Rural planning and agricultural reform, with a few diagrams and plans ; also prefabrication details for small rural buildings, and plans for such buildings.

JOURNAL OF THE TOWN PLANNING INSTITUTE, 1939 Nov.-Dec., p. 1 :

Presidential address by W. Harding Thompson [F.] dealing with planning needs during and after the war.

JOURNAL OF THE TOWN PLANNING INSTITUTE, 1940 Jan.-Feb., p. 28 :

Town and country planning during war : extracts from paper by Dr. Thomas Adams for the N.H.T.P.C.

ARCHITECTURAL RECORD (New York), 1939 Dec., p. 57 :

The function of the architect in town planning : article, with reproduction of A.I.A. (Washington Chapter) exhibits at Washington.

JOURNAL OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS, 1940 Jan. 2, p. 457 :

Town planning from the standpoint of the municipal engineer : article by T. B. Floyd.

MONATSSHEFTE FÜR BAUKUNST UND STÄDTEBAU (Berlin), 1940 Sept. (No. 9), p. 77 :

Industrial garden cities near Brunswick for the Hermann-Göring works : lay-out plans, air views, and drawings for buildings, H. Rimpl, architect.

COSTRUZIONE, CASABELLA (Milan), 1940 Feb. (No. 146), p. 9 :

Town replanning and flat-building scheme for part of Naples, with views as proposed : by L. Cosenza, R. Alberti, and other architects and engineers.

ARCHITEKTURA S.S.S.R. (Moscow), 1939 July (No. 7), pp. 6, 16 :

Article on the reconstruction of the town of Tashkent, in Russian Turkestan, with plans and aerial views (as existing or contemplated) and photographs, also plans and street elevations of projected blocks. Also lay-out and buildings for Chirchik.

ARCHITEKTURA S.S.S.R. (Moscow), 1939 Dec. (No. 12), p. 49 :

Great Zaporozh'e : a new town in Russia, with designs for its buildings—V. A. Lavrov & G. M. Orlov, architects.

DE 8 EN OPROUW (Amsterdam), 1940 Feb. 17, p. 31 :

City hall, Amsterdam : city street planning and lay-out studies as a problem in design.

ARCHITETTURA (Milan), 1939 Dec., p. 711 :

Architecture of Italian colonisation in Libya, G. Pellegrini, architect : rural centres and villages, each with church, municipal buildings, administrators' houses, and a theatre.

ARCHITECTURAL FORUM (New York), 1940 Jan., p. 62 :

A Garden city experiment in U.S.—Greenbelt, Maryland—nearing fruition (cf. earlier description in Architectural Record, Sept. 1936).

JOURNAL OF THE INSTITUTION OF CIVIL ENGINEERS, 1940 Mar., p. 55 :

British road development and modern practice : paper, with diagrams of junctions, surface construction and other particulars, by J. G. Pidgeon.

SCHWEIZERISCHE BAUZEITUNG (Zürich), 1939 Oct. 28, p. 203 :

Gardens in the Zürich Exhibition : photographs, with lecture reports and photographs on gardens in general.

## Obituary

MR. H. P. G. MAULE [F.]

We record with great regret the death of Mr. H. P. G. Maule [F.], Mr. Paul Ogden [F.] and Mr. W. H. Romaine-Walker [A.] and of three of the Institute's distinguished Hon. Corresponding Members, M. Robert Maillart of Switzerland, Professor Wilhelm Dörpfeld of Germany and M. Adrien Delpy of Belgium, and also of John Kennedy, a student of the R.I.B.A., who died in the sinking during the fighting in Norway of H.M.S. *Gloucester*, on which he was a sub-lieutenant R.N.R. His death, the loss to architecture of a fine spirited, able young architect, is the first of the line of war casualties which we are bound to have to record in the coming months.

Mr. Maule, who died suddenly on 15 May, was President of the Essex, Cambs and Herts Society: he was headmaster of the A.A. School from 1914 to 1918 and after distinguished military service during the last war, when he won the D.S.O., became chief architect to the Ministry of Agriculture and Fisheries. Mr. Paul Ogden, who died at the age of 84 last April, was one of the senior and most loved of Manchester architects. For many years he was hon. secretary of the Manchester Society and later its President.

The following is a short memoir by a friend of the Duke of Rutland [Hon. F.], who died last April. Many members who attended the Manchester Conference in 1932 will remember the Duke's guidance round Haddon Hall.

### THE DUKE OF RUTLAND

By the death of the Duke of Rutland, the Institute loses an Honorary Fellow whose architectural and antiquarian learning would have been exceptional even among those whose whole lives were devoted to these studies. The preservation of Haddon Hall, and the rediscovery there of beauties that disuse and neglect had hidden, made a happy vocation that ran like a thread through all his other activities. It was already predominant in his thoughts when he was an undergraduate at Cambridge, and from then till his death he was constantly at work upon it, often with his own hands.

For this task he equipped himself with a knowledge both of archaeology and of building crafts that was, in its sphere, unrivalled. No ancient monument can ever have been more skilfully and tenderly cherished, his love for the home of his family being united to a taste and a skill in which no professional expert could have surpassed him. Through his labours the house that had so long stood desolate became habitable again without damage to the smallest ancient feature; and in late years he had the reward of living with his family in the midst of the beauty he loved so dearly.

Among his other antiquarian interests was the study of the designs displayed on mediæval floor-tiles, and of these tiles he leaves a remarkable collection. In everything he wore his learning with great modesty; he seemed to love knowing about beautiful things only as an enhancement of his pleasure in the beautiful things themselves.

## Notes

### FEES FOR THE REPAIR OF WAR DAMAGE

A note was published in the JOURNAL of 11 December 1939 of the arrangements made by the Officers of the Practice Committee with representatives of the Ministry of Health on the question of fees to be charged to local authorities by architects employed on repairs of war damage carried out under the provisions of the Essential Buildings and Plant (Repair of War Damage) Act, 1939.

A note of these arrangements was sent out by the Ministry to all local authorities in a memorandum, 11a.16, dated 28 December 1939.

The memorandum calls the attention of local authorities to the fact that local qualified architects are being employed by many authorities to assist them in this work, and it suggests the desirability of other authorities adopting the same procedure.

### LEICESTER COLLEGE OF ART AND CRAFTS SCHOOL OF ARCHITECTURE AND BUILDING

Applications are invited for the appointment of Head of the School of Architecture and Building. Applicants must be F. or A.R.I.B.A. and should have experience of organisation, lecturing and teaching.

The successful candidate will be required to take up duties in September next. Salary: £400—£600. Further details may be had from the Registrar of the College.

Applications by letter, accompanied by copies of three testimonials and the names of two referees, must reach the Registrar not later than Friday, 7 June 1940.

### THE GRISSSELL GOLD MEDAL

The Grissell Gold Medal and £50 for the Encouragement of the Study of Construction for 1940 has been awarded to Mr. R. Fraser Reekie [A.], of the Leeds School of Architecture, and a Certificate of Honourable Mention has been awarded to Mr. James Conner [A.], of the Aberdeen School of Architecture.

The subject set for the competition was "An Underground Garage."

### THE BANISTER FLETCHER SILVER MEDAL

The Banister Fletcher Silver Medal and £26 5s. for the Study of the History of Architecture for 1940 has been awarded to Miss Mary V. Morgan (*Probationer*), of the Welsh School of Architecture, and Certificates of Honourable Mention have been awarded to Mr. T. Philip Allen (*Student*), of the School of Architecture, The Polytechnic, Regent Street, London, and Mr. W. J. Phillips (*Probationer*), of the Welsh School of Architecture.

The subject set for the competition was "A Roman goes to the Baths."

## Notes from the War Executive Committee

### MEMBERSHIP

AT THE MEETING 30 JANUARY 1940

#### Election March 1940

Applications for membership were approved as follows: As Fellows, 2 applications; as Associates, 43 applications; as Licentiates, 13 applications.

#### Election June 1940

One application for membership as Associate from an overseas candidate was approved.

#### Reinstatements

The following ex-members were reinstated:

As Associates: Robert Eggleston, Yahya Cassumji Merchant, Herbert Luck North [*Ret.A.*].

#### Resignations

The following resignations were accepted with regret:

Gordon Leslie Broad [F.], Harold Fenwick Coates [F.], Percival May Dawson [F.], George Albert Butling [A.], Frank Pentland Chambers [A.], Elizabeth Mary Kenyon [A.], Oliver David George Manning [A.], Thomas Gustavus Whitehead [*Retd.A.*], Harold Frederick Coales [L.], John Andrew Reid [L.].

#### Transfer to the Retired Members' Class

The following members were transferred to the Retired Members' Class:

As Retired Fellows: Sydney Herbert Meyers, George Weald, Edmund Richardson Wilson; as Retired Associates: Walter Hooker, Robert Arthur Reeve; as Retired Licentiate: John Thomas Ince Clark.

*Election of Students*

92 Probationers were elected as Students.

AT THE MEETING 13 FEBRUARY 1940

The following members were elected: As Hon. Corresponding Member, 1; as Fellows, 7; as Associates, 34; as Licentiates, 11.

*Resignations*

The following resignations were accepted with regret:

Peter Relton Coulson Allison [F.], Frank Ernest Whittaker [L.].

*Transfer to Retired Members' Class*

The following members were transferred to the Retired Members' Class:

As Retired Fellow: Professor Charles Herbert Reilly; as Retired Associates: Thomas Sharpe, Thomas Glynn Evans.

*Election of Students*

14 Probationers were elected as Students.

AT THE MEETING 27 FEBRUARY 1940

*Reinstatements*

The following ex-members were reinstated:

As Fellow: Frederick Bligh Bond; as Associate: Hylton Theodore Shirley D'Alwis; as Licentiate: Walter Harrison Fielding.

*Resignations*

The following resignations were accepted with regret:

Stephanos Constanturos [F.], John James Cresswell [F.], Arthur Huddart [Retd.F.], Pamela Dorothy Erith [L.], Ernest Edward Bowden [L.], James Burns [L.], Edward Ford Duncanson [L.], Samuel Harrington Evans [L.], Henry James Mark [L.], Arthur Dalton Sharp [L.], Leonard Sharp [L.], Gerald Seymour Valentin [L.], Wellington White [L.], William Harvey Ross [Retd.L.].

*Transfer to Retired Members' Class*

The following member was transferred to the Retired Members' Class:

As Retired Licentiate: Freeman Housley.

*Election of Students*

8 Probationers were elected as Students.

AT THE MEETING 12 MARCH 1940

The following members were elected: As Fellows, 2; as Associates, 43; as Licentiates, 12.

*Election April 1940*

Applications for membership were approved as follows: As Fellows, 5 applications; as Associates, 66 applications; as Licentiates, 14 applications.

*Election June 1940*

Applications for membership from overseas candidates were approved as follows: As Fellows, 2 applications; as Associates, 2 applications.

*Reinstatements*

The following ex-members were reinstated:

As Fellow, Frederick Andrew Roberts; as Associate, Alex Fough; as Licentiate, G. Felix Wilson.

*Resignations*

The following resignations were accepted with regret:

Harry Thomas Bill [L.], Helen Betty Blaker [L.], Frank Firth [Retd.L.].

*Transfer to Retired Members' Class*

The following members were transferred to the Retired Members' Class:

As Retired Fellow: John Burland Chubb; as Retired Licentiate: Hugh William Ellis Ruffle.

*Election of Students*

8 Probationers were elected as Students.

*Schools of Architecture*

On the recommendation of the Visiting Board and the Officers of the Board of Architectural Education, the School of Architecture, the Northern Polytechnic, London, has the recognition continued of its three years' full-time Day Course and the five years' Evening Course as exempting from the R.I.B.A. Intermediate Examination.

The five years' full-time Day Course is now recognised under the usual conditions for exemption from the R.I.B.A. Final Examination,

and leave has been granted for the Professional Practice Examination to be held in the School under the usual conditions.

It was also decided to continue the recognition of the three years' full-time Diploma Course of the School of Architecture, Nottingham College of Art, for exemption from the R.I.B.A. Intermediate Examination.

*APPOINTMENTS**Architects' Registration Council*

Mr. Joseph Addison [F.], Mr. T. A. Darcy Braddell [F.], Mr. H. Chalton Bradshaw [F.], Professor L. B. Budden [F.], Mr. Henry M. Fletcher [F.], Mr. Gordon W. Jackson [F.], Mr. Hubert Lidbetter [F.], Mr. H. P. G. Maule [F.], Mr. Anthony Minoprio [L.], Mr. A. H. Moberly [F.], Mr. Stanley C. Ramsey [F.], Mr. Thomas E. Scott [F.], Mr. C. G. Stillman [F.], Mr. Sydney Tatchell [F.], Mr. Geoffrey C. Wilson [F.].

*A.R.C.U.K. Admission Committee*

Mr. H. Chalton Bradshaw [F.], Mr. J. D. Hossack [F.], Mr. H. G. C. Spenceley [L.], Mr. Geoffrey C. Wilson [F.].

*Professional Classes Aid Council*

Mr. Maxwell Ayrton [F.], in place of Mr. Austin Blomfield [L.].

*Central Institute of Art and Design: Provisional Committee*

Mr. H. S. Goodhart-Rendel [F.] in place of Mr. H. Chalton Bradshaw [F.].

## Membership Lists

### ELECTION: APRIL 1940

The following candidates for membership were elected in April 1940:

#### AS FELLOWS (6)

JENKINSON: DAVID BARNES [L. 1905], Rotherham.  
LEWIN: Major HARRY ALMOND [L. 1929].  
PILDITCH: PHILIP HAROLD, F.S.I. [L. 1920].

The following Licentiates who have passed the qualifying Examination:

BLOMFIELD: FRANCIS BERRINGTON, New Delhi.  
LOBB: HOWARD LESLIE VIGARS.

And the following Licentiate who is qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925:

LOUKES: DOUGLAS HENRY, Cambridge.

#### AS ASSOCIATES (68)

AGLAND: Lady ANNE STELLA.  
ANGIOR: Miss MARY KATHLEEN, Wigan.  
ARSHAVIR: ARA LEO, Manchester.  
ARTHUR: PETER RANDALL, Birmingham.  
BARKER: WILLIAM, Chester.  
BERESFORD: Miss BARBARA MARY, Wolverhampton.  
BRUCE: JOHN NIGEL GREY.  
CHAIKIN: ISAAC.  
CHAMBERLAINE: DONALD, Whitstable.  
CHRISTIE: ROBERT JAMES BAYNE, Tipiton.  
COX: JAMES HARRY.  
CRAGGS: JOHN BRABANT, Newcastle-upon-Tyne.  
CRICKMAY: ARTHUR HAYTER.  
CRICKSHANK: STEPHEN.  
DAVIE: ERIC HILL.  
DEAN: ROBERT ALEXANDER, Belfast.  
DEAS: JOHN HENDERSON, Thorpe-next-Norwich.  
DELSON: EDWARD.  
FORD: JOHN IVOR, Liskeard.  
FOY: JOHN DORIC, Manchester.  
GRIFFITHS: NEVILLE, Crewe.  
HAMMETT: RICHARD DEREK.  
HAMMOND: LEONARD HOLMES.  
HETHERINGTON: HAROLD RIDLEY, Hexham.  
HIRST: JOHN SIMPSON.  
HOPKINS: RHYS EVAN, Melbourne.  
HOWELS: RUSSELL ARNOLD, Dip.Arch. (Cardiff), Pen-y-graig, Glam.

HUCKLE : HORACE GEORGE.  
 JONES : HARRY MANSELL, Shrewsbury.  
 JONES : RONALD NORMAN, Birkenhead.  
 JURY : ARCHIBALD GEORGE, Taunton.  
 LEE : MRS. ANNIE.  
 LOWDON : THOMAS FENWICK, Dip.Arch., Stockshield-on-Tyne.  
 LYON : THOMAS FINDLAY, Ayt.  
 McMASTER : HUGH, Northallerton.  
 MILBURN : FRANCIS THOMAS, Birtley.  
 MONK : FREDERICK GEOFFREY, B.A., Manchester.  
 OSLER : GEORGE CECIL, Robertson, Cape Province.  
 OXLEY : THOMAS DERRICK.  
 PAYNE : DOUGLAS GILBERT.  
 PENN : CHRISTOPHER DE COURCY, Mumbles, Glam.  
 POOLEY : FREDERICK BERNARD.  
 PRESTON : EDWARD KETH.  
 RALPH : WILLIAM HERBERT.  
 RHATIGAN : BERNARD FRANCIS, B.Arch., Dublin.  
 ROBB : GEORGE CLARK, Oxford.  
 ROFT : WALTER CROSSLEY, Bingley.  
 RYDER : WILLIAM WALTER.  
 SADDLER : ROBERT, Edinburgh.  
 SANDBROOK : KENNETH JAMES.  
 SCARTH : HENRY ARTHUR.  
 SEABROOKE : DENIS HERBERT.  
 SEATON : ROWLAND ARCHIE.  
 SELDON : JACK WILLIAM.  
 SHAW : CYRIL GORDON, Dip.Arch., Chorley.  
 SIDEBOTTOM : PERCY BROOKE, Mildenhall.  
 SMITHSON : GEORGE HUGH.  
 STEEL : JOHN, Renfrew.  
 THORNLEY : HARRY.  
 TINGAY : JOHN PHILIP.  
 WATKIN : IVAN WILLIAM.  
 WATSON : HARRY.  
 WEIR : RALPH WILLIAM, Middlesbrough.  
 WELLS : CLIFFORD BERNARD.  
 WHARFE : HAROLD, Dip.Arch., Sheffield.  
 WILLIAMS : EDWIN HERBERT HORSLEY, D.A.  
 WOLF : ANTHONY PETER.  
 WOOD : HENRY MAURICE DALL.

## AS LICENTIATES (11)

ALNER : REGINALD FRANK.  
 BROWN : WILLIAM GEORGE.  
 COATES : JOHN WILLIAM, Leeds.  
 COOKE : LESLIE, Morley.  
 DEMUTH : RONALD PITCHAIRE.  
 GOMERSALL : JOSEPH, Manchester.  
 OLDRIDGE : ALEC, Cardiff.  
 RUST : WILLIAM, Cheltenham.  
 SPEAR : LEONARD, Manchester.  
 THOMSON : THOMAS FINLAYSON, Witney.  
 TUFFY : THOMAS HENRY, Stafford.  
 WARREN : EDWARD ALAN.  
 WIGGINS : BERNARD THOMAS REDVERS.  
 WOOD : EDGAR JOSEPH.

## ELECTION : MAY 1940

The following candidates for membership were elected in May 1940 :—

## AS FELLOWS (10)

AMFORD : TOLSON MURRAY [A. 1928], Birmingham.  
 EDMONDS : REGINALD [A. 1932], Birmingham.  
 HAMILTON : LIEUT. HECTOR OLIVER, R.N.V.R. [A. 1939].  
 HOWELLS : DAVID JOHN [A. 1922], Swansea.  
 JACKSON : HERBERT [A. 1930], Birmingham.  
 MAIR : JOHN THOMAS [A. 1909], Wellington, New Zealand.  
 MONRO : CHARLES ERNEST [A. 1903], Glasgow.  
 NIBBY : JOHN VERNEY, M.A. [A. 1931], Portsmouth.

SHAW : IVOR [A. 1930].  
 SYNNOT : LT.-COL. REYMOND, M.C. [A. 1921], Sydney.

## AS ASSOCIATES (22)

BARRY : KEVIN LEO, B.Arch. (N.U.I.), Dublin.  
 BATEMAN : THOMAS ROBERT, Cambridge.  
 BOYD : MISS MARJORIE ISPEL.  
 DANNATT : ANTHONY RICHARD.  
 DAVIDGE : MISS MARGARET MARY.  
 GINNELL : PHILIP, B.Arch., Dublin.  
 GOODALL : ERNEST ROY.  
 GRIFFIN : HASTINGS HARRISON MONTAGUE, New Delhi.  
 KADLEIGH : SERGE GEORGE.  
 LEVY : MISS RUTH FRANCIS.  
 LOVETT : ERNEST WILLIAM.  
 McINTYRE : EDWARD MACKIE, Aberdeen.  
 MISTRY : KEKI DORABJI, Liverpool.  
 MITCHELL : MISS GRACE DAWSON, Glasgow.  
 MURRAY : ATHOL JAMES, Cape Town.  
 SHUTTLEWOOD : WILLERID KENNETH.  
 SIM : MISS ISHBEI.  
 SMITH : FRANK GIBSON, Ormskirk.  
 SMITH : RONALD ALEXANDER RATHBONE, Manchester.  
 TAYLOR : ALEXANDER HAMISH, Aberdeen.  
 WEISS : OLIVER SYDNEY, Leamington.  
 WILKINSON : STANLEY, B.Arch. (Hons.), Liverpool.

## AS LICENTIATES (6)

ANDREWS : FRANK WALTER, Faringdon, Berks.  
 CLOSE : HUGH FREDERICK BURY, Walsall.  
 ENGLAND : ARNOLD TRAVIS, Lytham St. Annes.  
 HISCOCK : ROBERT ERNEST.  
 LERESCHE : GUY, Llandudno.  
 VAUGHAN : CLIFFORD GLYN, Swansea.

## Applications for Election

## ELECTION : JUNE 1940

An election of candidates for membership will take place in June 1940. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection of any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Thursday, 30 May.

The names following the applicant's address are those of his proposers.

## AS ASSOCIATES (13)

The name of a school, or schools, after a candidate's name indicates the passing of a recognised course.

BELCH : JOHN ROBERT DE CLIFTON [Arch. Assn.], 28 Leinster Square, W.2. G. A. Jellicoe, J. Murray Easton and Arthur W. Kenyon.  
 BOOTH : FRANK, Dip.Arch. (Leeds) [Leeds School], 41 Park Court, North Park Road, Bradford. F. L. Charlton, W. Illingworth and Eric Morley.  
 CLEWER : SELBY JAMES [Birmingham School], Hillside, Hyde Lane, Kinnor, Stourbridge, Worcs. James A. Swan, George Drysdale, and John B. Surman.  
 DICKINSON : ALBERT DENNIS, Dip.Arch. (Leeds) [Leeds School], 308 York Road, Leeds, 9. Victor Bain, Chas. W. Tomlinson and G. H. Foggett.  
 DIXON : ARNOLD, B.A. [Victoria University, Manchester], 721 Oldham Road, Newton Heath, Manchester. Professor R. A. Cordingley, H. T. Seward and C. Gustave Agate.  
 PENOYRE : JOHN RIVETT BAKER STALLARD [Arch. Assn.], Baker's Mill, Chalford, Glos. G. A. Jellicoe, Arthur W. Kenyon and J. Murray Easton.



**POWELL**: MICHAEL CARLETON LANGHORNE [Arch. Assn.], Lavington Rectory, Petworth, Sussex. E. Stanley Hall, Hubert M. Fairweather and G. A. Jellicoe.

**ROWNTREE**: MRS. DIANA GABRIELLE [Arch. Assn.], Endcliffe, Scarborough, Yorks. Howard Robertson, E. Stanley Hall and John Murray Easton.

**SCARD**: HENRY EDWARD ALFRED, Dip. Arch. (Cardiff) [Welsh School of Architecture], 30 Hamilton Terrace, Milford Haven. Percy Thomas, W. S. Purchon and T. Alwyn Lloyd.

**SMART**: GORDON ALEXANDER [Aberdeen School], 18 Park Avenue, Hounslow, Middlesex. R. Leslie Rollo, John G. Marr and James B. Nicol.

**STIFF**: JAMES ALFRED HERBERT [The Polytechnic, Regent Street, London], 57 Scarle Road, Wembley, Middlesex. Joseph Addison, Hubert Bennett and Herbert Kenchington.

**TOWNSEND**: GEORGE BRIAN, P.A.S.I. [Spec. Final Ex.], 180 Botwell Common Road, Hayes, Middlesex. M. A. Shute, L. Stuart Stanley and C. B. Willcocks.

**WATSON**: THOMAS CAMPBELL [Aberdeen School], 2 Macewen Drive, Inverness. J. Alistair Ross, J. A. O. Allen and R. Leslie Rollo.

#### AS LICENTIATES (4)

**BENNETT**: NORMAN, Dales Brow House, Worsley Road, Swinton, Manchester. Hubert Bennett and the President and Hon. Sec. of the Manchester Soc. Arch. under the provisions of Byelaw 3 (a).

**CLODE**: S. DOUGLAS, Architectural Assistant to the Ruislip-Northwood U.D.C., Cranbourne Road, Northwood. George E. Clare, E. P. Wheeler and F. Herbert Mansford.

**GOODMAN**: CECIL JOSEPH, c/o Messrs. Kemp & How, 4 Bloomsbury Square, W.C.1; 242a Wickham Road, Shirley, Croydon. W. Murthwait How, Alfred B. Yeates and Percy B. Dannatt.

**GREEN**: JAMES DUDLEY, c/o Messrs. W. P. Horsburgh & Son 2 Exchange Street East, Liverpool 2; 33 Dorbett Drive, Crosby, Liverpool 23. Wm. P. Horsburgh, Gilbert Fraser and T. Taliesin Rees.

## Notices

#### ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the next available election they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 15 June 1940.

#### OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

#### CESSATION OF MEMBERSHIP

Under the provisions of Byelaw 21 the following has ceased to be a member of the Royal Institute:—

*As Associate:*  
James Warren Elkins.

#### ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND: ANNUAL CONVENTION 1940

The Annual Convention of the R.I.A.S. will take place at Stirling on Friday, 31 May.

## Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

#### ROYAL NATIONAL EISTEDDFOD, MOUNTAIN ASH

Entry forms and particulars of a competition for the design of a modern concrete bridge may be obtained on application (enclosing stamped addressed envelope) to the Local Organiser, Eisteddfod Offices, Mountain Ash, Glamorgan. Prize £10. Adjudicator, Mr. T. Alwyn Lloyd [F.]. Closing date, 15 June.

#### MARGATE: CIVIC CENTRE

The Corporation have awarded an additional third premium of £200 to Mr. A. Koerner [L.].

## MEMBERS' COLUMN

#### PARTNERSHIPS AND PRACTICES

THE practice of Mr. Arthur F. Hunt [L.], formerly of 46 Blandford Street, Manchester Square, London, W.1, has been taken over by Messrs. Melville Seth Ward & Partners, of 78 Gloucester Place, London, W.1, for the duration of the war, as Mr. Hunt is now serving as a Captain in H.M. Forces.

MR. E. M. K. ELLERTON has retired from the practice of Messrs. Mayell, Lockton & Ellerton by mutual consent as from 25 March, owing to circumstances arising out of the war. The firm will henceforth remain as before, viz., "Mayell & Lockton," at the same address, St. James House, 173 Holland Park Avenue, W.11. Phone: Park 5010.

#### CHANGES OF ADDRESS

MESSRS. H. V. ASHLEY & WINTON NEWMAN [FF.] are giving up their emergency office at 100 Frognaal, Hampstead, as from 29 April 1940, and are returning to No. 14 Gray's Inn Square, London, W.C.1 (Telephone No.: Chancery 8368).

W. E. EDLESTON & G. L. CADELL [A.I.] have closed their office at 46 Old Bond Street, W.1 for the duration of the war. Correspondence should be addressed to 90 Westbourne Terrace, London, W.2. Tel.: Paddington 5894.

MR. WILLIAM H. SCOTT, F.S.I. [F.], has removed his office (until further notice) to 43 Plymouth Road, Penarth, Glam. Telephone: Penarth 421.

MR. GORDON LEE [A.I.] has changed his private address to Oakhurst, Austin Road, Laleston, near Bridgend.

MR. J. S. THOMSON [A.I.] is now conducting his practice at his private residence, 12 Durrington Park Road, West Wimbledon, S.W.20, having closed his Offices at 49, Hill Road, Wimbledon, S.W.19. Telephone number will remain unaltered.

#### OFFICE ACCOMMODATION

MEMBER has two well-lit unfurnished offices to let in Bloomsbury Square. Rent £65 p.a.—Apply Box 2940, c/o Secretary R.I.B.A.

ASSOCIATE Member has fully equipped office one minute Monument. Rent £26 inclusive. Second floor. Very good light; lift.—Box 2530, c/o Secretary R.I.B.A.

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